

NATIONAL TRANSPORTATION SAFETY BOARD

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 IN RE: :  
 :  
 THE EL FARO INCIDENT OFF THE: NTSB Accident No.  
 COAST OF THE BAHAMAS ON : DCA16MM001  
 OCTOBER 1, 2015 :

:-----:  
 INTERVIEW OF: CHRIS LEVESQUE, FIRST ENGINEER

Thursday,  
 October 8, 2015

Jacksonville, Florida

BEFORE:

BRIAN YOUNG, NTSB  
 JIM FISHER-ANDERSEN, TOTE Services  
 LOUIS O'DONNELL, ABS  
 [REDACTED] U.S. Coast Guard  
 [REDACTED] U.S. Coast Guard

PRESENT ON BEHALF OF THE INTERVIEWEE:

MIKE TANNER, ESQ., Tanner Bishop

This transcript was produced from audio provided  
 by the National Transportation Safety Board.

1 P-R-O-C-E-E-D-I-N-G-S

2 (4:18 p.m.)

3 MR. YOUNG: The recorder is on. We're going  
4 to go around the room, introduce ourselves. We'll  
5 verify that it's being recorded, just to let you know.  
6 And if you would approve of that.

7 MR. LEVESQUE: That's fine.

8 MR. YOUNG: It is 1418 on Thursday, October  
9 8th. This Brian Young, the engineering group chairman  
10 from the National Transportation Safety Board,  
11 conducting an interview in Jacksonville, Florida of the  
12 first engineer. And we'll go around the room,  
13 everybody introduce themselves. And at the end I'll  
14 have you, Chris, introduce yourself and spell your  
15 name.

16 MR. O'DONNELL: Louis O'Donnell, system  
17 chief, ABS.

18 [REDACTED] U.S. Coast Guard.  
19 I'm here with (inaudible) with the engineering work  
20 group.

21 MR. FISHER-ANDERSON: Jim Fisher-Anderson,  
22 TOTE Services. I'm with the engineering group.

23 MR. TANNER: I'm Mike Tanner, counsel for  
24 Mr. Levesque.

25 MR. LEVESQUE: Chris Levesque. My name's

1 spelled C-H-R-I-S, Levesque, L-E-V-E-S-Q-U-E.

2 MR. YOUNG: Okay. Again, thank you, Chris,  
3 for coming down here. We appreciate your time. If you  
4 would just start out and give us a little background on  
5 your maritime training and your sailing history? And  
6 tell us about how long you've been working for TOTE and  
7 aboard the El Faro.

8 MR. LEVESQUE: All right. I graduated in  
9 1995 from Maine Maritime. From there I worked for  
10 Mobil Oil, Foreign Flag Fleet for year on VLCCs, two  
11 ships, the Magnolia and the MV Hawk (phonetic).

12 From there I started working at U.S. flag  
13 companies being transportation for about a year, year  
14 and a half on the T-2 tankers. The company folded.  
15 And then that's when I got into the AMO union.

16 First job on there was breaking out the  
17 Petersburg, move it to Alabama. Brought it to  
18 (inaudible). Then eventually they went for FOS and  
19 brought it over to Guam.

20 Before we went to Guam we stopped off at  
21 Korea and did operations. Went to Guam. I was there  
22 for, I can't remember how long, a year, two years  
23 maybe, if that. And then from there I went to the  
24 Veeda ship (phonetic), the MV Magnolia, no Donna Sholes  
25 (phonetic), I'm sorry, Donna Sholes for Veeda.

1                   And then I stopped shipping for four years.  
2                   The first year I worked for a midsized general  
3                   contracting company. And then the next three years I  
4                   owned and operated with a partner a small HVAC company.  
5                   And then from there I went back to shipping, 2004.

6                   And I started my shipping career again on  
7                   the Northern Lights, the SS Northern Lights, which is  
8                   now the El Faro. And so I've been on that ship off and  
9                   on. But I was on the ship all the way up to they  
10                  converted it to SeaStar, to the El Faro. Did a few  
11                  more years.

12                  And then I went to the Flipper Tail, SS  
13                  Flipper Tail, which is a grain ship in Norfolk,  
14                  Virginia. Did that for about six months, and then came  
15                  back to Sea Star, and worked on the El Morro. I was on  
16                  that until they scrapped it. Brought the ship down to  
17                  Brownsville, Texas, and left. And from there went back  
18                  on the El Faro. And been on that ship every since.

19                  MR. YOUNG: Can you give us a ball park time  
20                  when you got back on the El Faro?

21                  MR. LEVESQUE: Back on the El Faro?

22                  MR. YOUNG: When you came back and started  
23                  working on the El Faro, after the El Morro. Just so we  
24                  can gauge how long you've been working on that ship.

25                  MR. LEVESQUE: You know, I can't think of

1 the year. Let me see. I'm just guessing. I mean, let  
2 me see, before I was on the ship I was on the El Faro  
3 when we were going overseas to the Persian Gulf. I  
4 mean, on the, can't even think of the name now.

5 When the ship was the Northern Lights it was  
6 on the, going to Persian Gulf. Then we converted it.  
7 It was '06 maybe, '07. I don't, I wouldn't quote me on  
8 that. And then was on it for two, maybe 2008 I was in  
9 Norfolk for six months. And then I came back to the El  
10 Morro. And then from there I've been on it ever since,  
11 these ponce (phonetic) class ships.

12 MR. YOUNG: So it's been years?

13 MR. LEVESQUE: Oh yes.

14 MR. YOUNG: Okay. And have you held various  
15 positions aboard the El Faro?

16 MR. LEVESQUE: Oh, yes. I was on Northern  
17 Lights when I was a third, second. And then when the  
18 ship was the El Faro I got bumped up to first, and been  
19 sailing first on it, you know, since I've been sailing  
20 first on the two ships.

21 (off microphone comment)

22 MR. YOUNG: Okay. And just going way back  
23 in time to your time at Maine Maritime Academy, how did  
24 you receive any steam training at the college?

25 MR. LEVESQUE: Oh, we had a training ship, a

1 steam ship.

2 MR. YOUNG: It was a steam ship back then?

3 MR. LEVESQUE: It was a steam ship back  
4 them. And then I did cadet shipping. I worked the, on  
5 the Marine Chemist (phonetic). Also, my one, my first  
6 year at school, that winter, that Christmas, all day I  
7 did my vacation on the Westward Venture.

8 MR. YOUNG: As a cadet?

9 MR. LEVESQUE: As a cadet. And then we did  
10 the Marine Chemist as a cadet. And then a training  
11 ship. Two tours on the training ship. Four months on  
12 the Marine Chemist, and a few weeks on the Westward  
13 Venture, all as a cadet.

14 MR. YOUNG: Okay.

15 MR. LEVESQUE: And then my first ship out --  
16 Well, then, yes, my first ship out was a steam ship.  
17 It was the, oh shit, I can't remember the name. It was  
18 the ship (inaudible). And I was on the MV Hawk. Oh,  
19 it was the Magnolia. It was the SS Magnolia was the  
20 first steam ship I sailed on on my license.

21 And then the second ship was a motor ship,  
22 which was the Hawk, MV Hawk. And then I went to the  
23 steam transportation, which were both steam ships.  
24 Well, I was on the, I think the Guadalupe was a steam  
25 ship. And I was on another steam ship. I can't

1 remember the name.

2 And then went to Petersburg, which was a  
3 steam ship. And then from there I went to the MV Donna  
4 Sholes, which was a motor ship. And then from there I  
5 went ashore for four years. And then came back, and  
6 been on steam ships ever since.

7 MR. YOUNG: That's a lot of steam time.

8 MR. LEVESQUE: Yes. I'm a dinosaur.

9 MR. YOUNG: So what license do you currently  
10 hold?

11 MR. LEVESQUE: Chief in Steam, First in  
12 Diesel.

13 MR. YOUNG: (Inaudible). Have you ever  
14 sailed chief?

15 MR. LEVESQUE: No.

16 MR. YOUNG: That's great. Thank you for  
17 that background.

18 MR. O'DONNELL: Excuse me. For the record  
19 (inaudible) has asked that Al come back in and attend  
20 this interview. So he'll be coming back in  
21 (inaudible).

22 MR. YOUNG: Okay.

23 MR. O'DONNELL: Okay.

24 MR. YOUNG: Sounds good. Okay. Now,  
25 getting into your position as first engineer aboard the

1 El Faro. Can you describe your daily routine and your  
2 job description as a first engineer aboard the El Faro?

3 MR. LEVESQUE: Daily routine was any  
4 preventive maintenance needed in the engine room. Then  
5 any immediate attention to any equipment or issues that  
6 would prevent the operation of the plant. And then I  
7 had to prioritize.

8 MR. YOUNG: And was a lot of preventive  
9 maintenance based on your PMS, your AMO system?

10 MR. LEVESQUE: Correct.

11 MR. YOUNG: And are you responsible for  
12 monitoring it and entering the maintenance --

13 MR. LEVESQUE: Yes, I am.

14 MR. YOUNG: -- from all the guys in your  
15 crew? Or any of the engineers?

16 MR. LEVESQUE: First down. Anybody, for me,  
17 anybody below me, any jobs that came up on AMOS I would  
18 have to, you know, clear.

19 MR. YOUNG: I see.

20 MR. LEVESQUE: Or if the job came up, and  
21 then I would, you know, say active. And then I'd clear  
22 it once the job was done.

23 MR. YOUNG: Okay. And would you put a  
24 description of the job?

25 MR. LEVESQUE: Yes.

1 MR. YOUNG: You'd type that up too? And  
2 none of the lower engineers would have access into AMOS  
3 to do that?

4 MR. LEVESQUE: No.

5 MR. YOUNG: No. That's a lot of maintenance  
6 to put in.

7 MR. LEVESQUE: Yes. I mean, some jobs are  
8 simple, you know, like greasing a bearing, or something  
9 like that. And other jobs are, a lot of jobs are  
10 redundant, a lot of redundancy jobs. So it was  
11 completed and what you did.

12 And, but anytime the, anything beyond what  
13 was a normal PM we, you know, give a good description  
14 of what you did, you know. So, I mean, you know, you  
15 had issues with a piece of equipment, you had to change  
16 out a part, you know, describe what you did and what  
17 happened, cause and effect.

18 MR. YOUNG: So would you say the maintenance  
19 system, AMOS, is pretty well documented with  
20 maintenance and actions performed?

21 MR. LEVESQUE: Correct.

22 MR. YOUNG: Okay. Did, other than AMOS, did  
23 you keep any other sort of record of maintenance or  
24 jobs completed on the ship, in any other form of  
25 documentation?

1 MR. LEVESQUE: No, if you want to count your  
2 overtime sheet. But that's, you know. Other than that  
3 any maintenance done in the engine room was in AMOS.

4 MR. YOUNG: Oh, it was in AMOS?

5 MR. LEVESQUE: Yes.

6 MR. YOUNG: And was AMOS available and used  
7 on the El Faro from the time you started? Or were  
8 there any other systems?

9 MR. LEVESQUE: There, on the El Faro it was  
10 AMOS. Yes, all AMOS.

11 MR. YOUNG: Always AMOS? And would you use  
12 AMOS also to order parts?

13 MR. LEVESQUE: No. AMOS was, parts were  
14 ordered through, well, no, well, parts were ordered --  
15 Well the chief ordered the parts. But, no, I'm sorry.  
16 I'm just thinking of something else. No. Parts were  
17 ordered through AMOS.

18 MR. YOUNG: Okay. And would you, are you  
19 responsible for ordering parts?

20 MR. LEVESQUE: Mainly the chief would do  
21 that. He would order the parts. I would, you know,  
22 indicate what parts I used. And then he would, you  
23 know, order any parts that were necessary, and  
24 consumables. And, you know, depending on what you  
25 needed it was entered in certain areas of the AMOS.

1 MR. YOUNG: Right. I took it that the chief  
2 would do the ordering?

3 MR. LEVESQUE: Mm hmm.

4 MR. YOUNG: Okay. And what about receiving?  
5 Would that --

6 MR. LEVESQUE: Receiving, most of the time  
7 he would do it. Because I worked with Jimmy most of  
8 the time. So receive, I would either check in, or he  
9 would check in the parts received. And then he'd clear  
10 it on AMOS.

11 MR. YOUNG: Okay. When it comes to  
12 maintenance coming due, and the work orders, would you,  
13 how would you prioritize your work for the department?  
14 And how would you know if there was anything overdue?

15 MR. LEVESQUE: Well, AMOS would indicate,  
16 because you would, a date would come up on it, you  
17 know, a due date. And then there would be in  
18 chronological order on the dates. And you would see if  
19 it was pending or due, or it was clear, you know.

20 And then I would prioritize by that, based  
21 off of what was actually going on in the engine room at  
22 the time, if we had other maintenance, like bigger  
23 jobs. Like, there was a lot of small jobs I would  
24 dictate to all the, you know, junior engineers.

25 If we had something big where everybody was

1 included, like cleaning a boiler, or doing condenser  
2 work, or some other type of maintenance, or a problem  
3 we had in the engine room, then I'd have to prioritize  
4 as such.

5 MR. YOUNG: And if a job didn't get done,  
6 and became further and further overdue, is there any  
7 way you could defer it and cancel the job?

8 MR. LEVESQUE: No. We'd have to do it. I  
9 mean, you would normally not defer jobs. They're there  
10 for a reason. So, I mean, if it got pushed back you  
11 would, if it's that late you would have to, you know,  
12 you'd clear it, you would do the job, clear it.

13 And then, you know, it would ask you why.  
14 Because something would come up saying why was the job  
15 not done on time. And you'd have to give a reason  
16 (inaudible).

17 MR. YOUNG: Okay. Okay. And now, are you  
18 aware of -- I know you've been off for a few months.  
19 But any outstanding jobs that were left outstanding  
20 when you left the ship?

21 MR. LEVESQUE: Well, there was jobs on there  
22 when the ship was laid up. And there was jobs that  
23 were years, you know, a couple of years old that  
24 weren't cleared. And they were just still on there.

25 And I didn't, I mean, I'm not supposed to

1 clear those. And we just, it was a few, some PMs. But  
2 stuff that was like done by outside contractors. Or  
3 stuff that had to have been, you know, with time up for  
4 inspection.

5 But nothing that serious that would affect  
6 the operation of the ship, I feel. I mean, if it was  
7 it would have been done. You know, they don't, those  
8 are there for a reason. If something did happen and  
9 they'd look, there would be negligence (inaudible).

10 MR. YOUNG: Okay. So you feel like AMOS was  
11 pretty well up to date?

12 MR. LEVESQUE: Yes.

13 MR. YOUNG: With the maintenance?

14 MR. LEVESQUE: Oh, yes.

15 MR. YOUNG: Okay.

16 MR. LEVESQUE: From the time they activated  
17 it, reactivated the ship, all the maintenance pretty  
18 much was done.

19 MR. YOUNG: Okay. So what we'll do is, when  
20 we're discussing a topic, and after I'm exhausted with  
21 my questions, I'm going to pass around the room and see  
22 if any of the other group people have any questions  
23 regarding this topic. Then we'll move on to something  
24 else. Okay. Anything new with AMOS, maintenance, his  
25 background?

1 MR. O'DONNELL: No. It seems like  
2 (inaudible) -- Lou O'Donnell with ABS. A lot of steam  
3 experience. You talk about big jobs in the engine  
4 room, like when you get everybody together.

5 MR. LEVESQUE: Yes. If we have --

6 MR. O'DONNELL: (Inaudible) main engine  
7 work, things like that, turbines, have a big generator  
8 work, like cleaning the generator, or something like  
9 that. Or --

10 MR. LEVESQUE: Well, something (inaudible).

11 MR. O'DONNELL: Yes, okay. Okay. Did you  
12 guys have any trouble with any of those, you know, and  
13 AMOS tying into the, you know, I guess the SMS onboard,  
14 or anything like that? I imagine some of your job  
15 descriptions, some of the things you guys did for PM  
16 came straight from your SMS as well, correct?

17 MR. LEVESQUE: Yes. But that was all done,  
18 like the jobs would dictate, would show who was in  
19 charge of delegating that job. It would be like the  
20 first engineer for, it would be either for the first,  
21 third, second, depending on what job was entailed.

22 And all the SMS was for the mate, you know.  
23 They would clear all that. I mean, I wouldn't even  
24 open it. Because that was his responsibility.

25 MR. O'DONNELL: Okay. And what about like

1 your junior engineers, your second and third? When you  
2 got a new second or third onboard did you do any  
3 familiarization with them?

4 MR. LEVESQUE: Absolutely.

5 MR. O'DONNELL: Yes, yes.

6 MR. LEVESQUE: Absolutely.

7 MR. O'DONNELL: Maybe spend a first watch  
8 with them, or something like that to --

9 MR. LEVESQUE: If it needed --

10 MR. O'DONNELL: -- make sure, you know, they  
11 were just, until they were comfortable and knew where  
12 everything was?

13 MR. LEVESQUE: It depended on the experience  
14 and how he felt.

15 MR. O'DONNELL: Yes.

16 MR. LEVESQUE: How we felt talking to him.  
17 And a good, the thirds, or the seconds, they stand a 48  
18 watch. So, you know, the first, if we're leaving port  
19 they're usually standing watch. So he can get an idea.  
20 Then if he needed to then we would stand with him. But  
21 we, the seconds that were on there were all, they'd  
22 been on the ship for awhile.

23 MR. O'DONNELL: Yes.

24 MR. LEVESQUE: We, you know, with Howie  
25 (phonetic) that was on there, he was on for years. And

1 then Noman (phonetic), Noman who just passed away on  
2 the ship there, he's been sailing second for a number  
3 of years.

4 And then second Mike Brennan (phonetic), he  
5 was sailing third. And then when I came on, and he was  
6 getting bumped up, he had a whole, you know, a notebook  
7 full of notes from the second training him to become  
8 his job.

9 And then when he was sailing, when he -- Not  
10 so much the watch. But it's the operation of the  
11 boilers, and the day to day function of the boilers. I  
12 was with him. And then when I felt confident he was  
13 fine, you know, I let him be, especially with feeling.  
14 I mean, he tested water, blow in tubes.

15 MR. O'DONNELL: So, very much sounds to me  
16 like there was a good trickle down effect from chief on  
17 down, you know, regarding probably the first giving you  
18 some guidance. And then, you know, the guys, when they  
19 see the guys coming to move up, you know, third to a  
20 second, there is kind of --

21 MR. LEVESQUE: Well, it was --

22 MR. O'DONNELL: -- a lot of good OJT going  
23 on --

24 MR. LEVESQUE: Yes.

25 MR. O'DONNELL: -- from the actual people

1 doing the job.

2 MR. LEVESQUE: When it happened. Because it  
3 was rare to see a third go to second.

4 MR. O'DONNELL: Yes.

5 MR. LEVESQUE: Because seconds never left.  
6 You know, we've all been, you know, me, I've been on  
7 there so many years. And then with the seconds, they  
8 were fine. So we just kind of like had a routine.

9 And everybody knew their job. So we had a  
10 lot of trust in that respect. And then when Mike got  
11 bumped up we were very happy. And he took the job and  
12 did great. So we were very happy. I was very happy  
13 with him.

14 MR. O'DONNELL: Good. Okay, thank you. I'm  
15 through with questions.

16 [REDACTED] with the Coast Guard.  
17 To expand a little bit on what Brian asked you about.  
18 Outside of AMOS did you have anywhere else that you  
19 kept records, like a notebook or a laptop, or anything,  
20 personally? With what was going on?

21 MR. LEVESQUE: Any work that was done, well,  
22 no, I'm sorry. There was a daily record I would keep  
23 on my computer in the office. And at the time --

24 [REDACTED] Okay. Do you have that computer  
25 now? Or did it stay --

1 MR. LEVESQUE: Oh, it was on the ship.

2 [REDACTED] It was on the ship.

3 MR. LEVESQUE: That was for, you know, any  
4 records I, you know, it was on a daily, every day, you  
5 know, we were putting in the stuff we did. And it was  
6 more like a -- Well, little things.

7 But the main things was put in AMOS. And  
8 then you would just kind of have a redundancy on the  
9 computer, just to have another avenue to look at. And  
10 then at the end of your tour you wrote your turnover  
11 notes. And then you kind of consolidate everything.

12 [REDACTED] Yes. Was there any major  
13 maintenance from, that was scheduled maintenance from  
14 AMOS that was due to be performed in the near future,  
15 or had been performed recently?

16 MR. LEVESQUE: I can't recall. You know, I  
17 mean, you mean when I left was there any pending  
18 maintenance coming up?

19 [REDACTED] Yes. Was there any major  
20 maintenance projects that were in the near future that  
21 were coming up, that were coming due? Or anything that  
22 had been done recently that you would consider major?  
23 Not like just routine minor maintenance.

24 MR. LEVESQUE: The trouble with, I'm trying  
25 to recall, I mean, I can't recall what AMOS was saying

1 when I got off. Like, we, there's, they do boiler  
2 cleanings once a tour. Like a chief does a boiler  
3 cleaning, both boilers cleaned once a tour. Main  
4 condenser is cleaned. Those are big jobs (inaudible).

5 They had, you know, I know they had a boiler  
6 inspection coming up with (inaudible). They were  
7 coming to look at the boilers, because they had  
8 questions about the tubes on there. Because the boiler  
9 front started bowing out.

10 And, you know, they were trying to get, you  
11 know, what the repairs needed to be done when the ship  
12 was going in the yard. But other than that, anything  
13 major coming up, no, not that I can recall.

14 [REDACTED] Thank you.

15 MR. FISHER-ANDERSON: No questions.

16 MR. YOUNG: No. Good. Just to introduce,  
17 that's Tom Roth-Roffy, he's our investigator in charge  
18 for our investigation. So he's my boss. So we are  
19 talking about notes and maintenance records, turnover  
20 notes. Are you required to leave a set of turnover  
21 notes after every rotation?

22 MR. LEVESQUE: Yes.

23 MR. YOUNG: Are they required to be sent  
24 into the office?

25 MR. LEVESQUE: Yes.

1 MR. YOUNG: And --

2 MR. LEVESQUE: Well, my notes? I know the  
3 chief's notes should be in. Mine are kept in the  
4 chief's office for his record. I make a copy. It's on  
5 the computer. One, you know, hard copy on the  
6 computer, and then I make a copy for my relief. And  
7 then I give another copy to the chief.

8 MR. YOUNG: Okay. And is it a standard  
9 format or a template that you fill out? Or is it --

10 MR. LEVESQUE: Yes.

11 MR. YOUNG: Okay. Company provided?

12 MR. LEVESQUE: No. We just go by what was,  
13 you know, done previously. It's not an actual  
14 formatted piece of paper. We just kind of, you know,  
15 list the equipment and any repairs that, you know, the  
16 highlights of the repairs, anything major.

17 You know, any of the small PMs, or any stuff  
18 like, you know, like greasing a bearing and stuff, it's  
19 not in there. Anything that him coming on that he  
20 should be aware that this maintenance, this repair was  
21 done.

22 Not so much maintenance, but repairs. So he  
23 has an idea of where, when coming on, and seeing that,  
24 oh, there was an issue with this again. So they just  
25 did a repair. And, you know, and make them easier to

1 assess a situation.

2 MR. YOUNG: Okay. Your relief, have you  
3 guys been based on the job for awhile? Or is this one  
4 of the first times?

5 MR. LEVESQUE: Two tours he did. He just  
6 got bumped up to first, Keith. This was his, I think  
7 his second or third, I think it's second tour, second  
8 or third tour as first.

9 MR. YOUNG: As first?

10 MR. LEVESQUE: Yes.

11 MR. YOUNG: But prior to that he was second  
12 in the boiler section?

13 MR. LEVESQUE: Second on the, yes.

14 MR. YOUNG: Before him there was another  
15 first obviously, before he was bumped up.

16 MR. LEVESQUE: Yes, Derrick, Derrick Mendow  
17 (phonetic).

18 MR. YOUNG: Okay.

19 MR. LEVESQUE: Oh, and, well I've -- No,  
20 Matt Campbell (phonetic). I'm sorry. Matt Campbell,  
21 yes, he came on. When I first was, when I came back to  
22 the El Morro, Derrick Mendow was sailing first. And  
23 then he left and Matt Campbell came over. And then we  
24 were base balling (phonetic) for a couple of trips.  
25 And then he went over to the Elionka (phonetic) as

1 chief.

2 MR. YOUNG: As chief, okay. Were there any  
3 other firsts or chiefs that left El Faro due to either  
4 quitting or being fired?

5 MR. LEVESQUE: I think, well they, yes,  
6 there's a number of firsts on there. I need to think  
7 back here. The names. Ask me out in the hallway I'd  
8 probably remember. Can't remember. Can't remember the  
9 names now, (inaudible).

10 Yes, there was one first I know of got  
11 fired. But not because of him directly. It was  
12 mismanagement of someone. Because of, I think he  
13 sprayed the main circ down. The guy, he was wiping, he  
14 was washing and he sprayed the main circ down and  
15 shorted it out. But that wasn't, that was, he was a  
16 manager (inaudible) watching him.

17 MR. YOUNG: Okay.

18 MR. LEVESQUE: But that's what I heard.  
19 It's hearsay so, I'm sorry. That's my understanding at  
20 the time.

21 MR. YOUNG: Okay.

22 MR. LEVESQUE: Firsts, I can't think of any  
23 right now.

24 MR. YOUNG: But as of late, you and the  
25 other first have been based on the job for the past few

1 trips, last two trips?

2 MR. LEVESQUE: Mm hmm.

3 MR. YOUNG: Okay. Any issues with your  
4 turnovers? Or is it a smooth transition?

5 MR. LEVESQUE: It's a smooth transition. I  
6 mean, I've been on the ship for years. So basically  
7 it's like, give me the highlights. I mean, if it's,  
8 it's in your, I mean, it's in your notes. And  
9 basically you're going to talk about anything that's  
10 immediately going on. Like, we just put the boiler back  
11 on. We did a boiler wash. So that's good. We're  
12 ready to go.

13 Or there's something, a repair going on  
14 right now, you know, make you up, bring you up to  
15 speed, then you go down and help finish the job, or  
16 watch contractors finish it. And then make sure we're  
17 on time. So everything's tested, and then we can  
18 leave.

19 MR. YOUNG: And you were due back the next  
20 13th, October 13th?

21 MR. LEVESQUE: October 13th, yes.

22 MR. YOUNG: On your rotation did you  
23 typically work with, which chief did you typically work  
24 with? Did you have more time with one than the other?

25 MR. LEVESQUE: James Robinson.

1 MR. YOUNG: And he's off duty now, right?

2 MR. LEVESQUE: Yes.

3 MR. YOUNG: Okay. How was your relationship  
4 with your chief?

5 MR. YOUNG: Jimmy, you got to build up trust  
6 with him. But after that he, you know, let's you be  
7 first. He doesn't micro manage, you know. But if he,  
8 you know, if he looks and he sees you're not doing your  
9 job then --

10 Or sometimes, you know, you get busy and  
11 things, you know, you kind of lax on something, he'll  
12 get on you. But bottom line, his first concern is  
13 safety of the ship, you know. Because he knows that --  
14 Or even, you know, just anything, you know.

15 If you're not up to speed with the  
16 equipment, or something like that, you know, things  
17 tend to happen. Or, you don't want to be blindsided  
18 by, you know, if you had tested this properly. Not  
19 tested, but if you'd done stuff on time then you'll be  
20 able to catch it early. But no, he was a good chief,  
21 solid chief, I mean, someone to be in the situation  
22 more.

23 MR. YOUNG: Okay. And how about the other  
24 chief, Richard?

25 MR. LEVESQUE: Rich? He was, Rich was

1 young. But he was good, he's fair, a good manager,  
2 smart guy.

3 MR. YOUNG: Did you get an opportunity with  
4 him much?

5 MR. LEVESQUE: Oh, yes, I worked with Rich.  
6 Actually, we brought it over to the, we brought the  
7 Morro over to Brownsville for scrap. Yes, I sailed, it  
8 was, I sailed with Jimmy a lot on the, when it was the  
9 Northern Lights. And then brought it over.

10 Now, was that Jimmy? Jimmy was on, Jim came  
11 on (inaudible) El Morro. It was someone else I was  
12 thinking of. But I sailed, yes I sailed a lot with  
13 Rich too when he became first, or chief.

14 MR. YOUNG: You had a decent relationship  
15 with them?

16 MR. LEVESQUE: Oh, yes.

17 MR. YOUNG: You feel comfortable working for  
18 them?

19 MR. LEVESQUE: Yes.

20 MR. YOUNG: And how would you describe  
21 Rich's safety culture, and bringing safety to the  
22 engine department?

23 MR. LEVESQUE: Mr. Policy.

24 MR. YOUNG: I'm sorry.

25 MR. LEVESQUE: Mr. Policy. He was always

1 looking at policy, making sure things were done  
2 properly. Because he didn't want to, you know, he  
3 didn't want to have room for interpretation. It was,  
4 you know, what he read for, you know, policy.

5 And, you know, things needed to be done a  
6 certain way, you know. Because it's there for a  
7 reason. And he followed it. Yes, he's very involved  
8 with the policy. And, you know, policies that the  
9 company had.

10 MR. YOUNG: And when it comes to safety and  
11 safety management, were there frequent engine  
12 department safety meetings?

13 MR. LEVESQUE: Frequent safety. We --  
14 Safety meetings? Define frequent.

15 MR. YOUNG: Monthly.

16 MR. LEVESQUE: Oh, well, we would -- Let's  
17 see, safety.

18 MR. O'DONNELL: In lieu of this, maybe  
19 rephrase your question a little bit. Did you have kind  
20 of an all hands every morning with your engine crew,  
21 and people starting to work (inaudible)? Kind of have,  
22 you know, maybe mix a little work with safety every  
23 morning. If you're going to do a big job, kind of lay  
24 out the plan on how you want things done. Kind of like  
25 mini JSAs, or something like that.

1 MR. YOUNG: Like tool box talk.

2 MR. LEVESQUE: Yes.

3 MR. O'DONNELL: Tool box talk?

4 MR. LEVESQUE: Well, not so much. Because,  
5 I mean, we were on for so long, we just knew what to  
6 do. I mean, safety was always there. That was,  
7 because, I mean, if you have a lot of new people on  
8 there then you would sit there and discuss.

9 And I would say, hey, this is what we're  
10 doing, you know, be aware of this going on, and stuff  
11 like that. But a lot of the guys had been doing it for  
12 so long we just knew the job was coming up. We'd prep  
13 for it, and get the job done. Not as frequent if it  
14 was like more of an experienced crew

15 Because you had people return all the time,  
16 an easier flow of jobs without so much getting hard  
17 core about the safety. Because we already knew what  
18 the safety issues were. And we knew where all the  
19 safety equipment was, and how to apply if needed.

20 MR. YOUNG: Okay. And if, and when you did  
21 get a new engineer aboard, how would that be --

22 MR. LEVESQUE: Oh, I would do an  
23 indoctrination.

24 MR. YOUNG: Okay.

25 MR. LEVESQUE: There was two books to sign.

1 It was an indoctrination book from the company that has  
2 the company policy. And then you had the chief  
3 standing orders. And they would have to, they would,  
4 you know, we would take time. Say, take as much time  
5 as you want. Read it and discuss with it if you have  
6 any questions.

7 And then I would walk around the engine with  
8 him, engine room. Show him all the escapes, the engine  
9 call alarms. Trying to help him get familiar with the,  
10 you know, our equipment.

11 But, you know, but he also has to make it,  
12 the person coming on has to make the initiative too.  
13 You know, you can't always, I mean, give him a basic.  
14 But you can't sit there and spoon feed him. Because  
15 it's, you know, they need to want to know stuff and  
16 learn.

17 But if they're just going to go in one ear  
18 and out the other it's hard. You do your best. But  
19 you hope that they're listening. But that was just  
20 anybody coming on they had to sign the policy from the  
21 company and the standing orders from the chief.

22 MR. YOUNG: Okay.

23 MR. LEVESQUE: If you have questions, ask.  
24 And, you know, I'd discuss after they got done. Did  
25 you understand what you read? And if you have any

1 questions, ask them.

2 MR. YOUNG: And was there one set of  
3 standing orders from the chief? Or did each position  
4 have their own standing orders?

5 MR. LEVESQUE: One standing order, a book  
6 from the chief that both chief's on.

7 MR. YOUNG: Okay. And that was generic for  
8 all the engineers, right? Each of the first, second,  
9 thirds, would sign that?

10 MR. LEVESQUE: Yes. They would all sign it.  
11 And, well, they could describe the responsibility that  
12 the chief expected the engineers from, you know, from  
13 the chief down to me, first, second, and the wipers,  
14 and the (inaudible).

15 MR. YOUNG: Okay. And while we're talking  
16 about SMS and everything, while you were issuing jobs  
17 to people and looking at the AMOS, were you ever  
18 required to do any sort of risk analysis for any of the  
19 jobs that you were --

20 MR. LEVESQUE: Not directly. If it was a  
21 standard with the chief, it generally got submitted to  
22 the office if the chief, you know, risk management  
23 assessment, stuff like that.

24 MR. YOUNG: Okay. And was your system set  
25 up that if a risk assessment value was a certain height

1 or number, then it would get transmitted to the  
2 company, if it had a certain value to it, based on  
3 risk?

4 MR. LEVESQUE: Not that I'm aware of.

5 MR. YOUNG: Okay. Would all of the risk  
6 assessments go to the office?

7 MR. LEVESQUE: Yes.

8 MR. YOUNG: Oh, they all would.

9 MR. LEVESQUE: Yes. They would generate, it  
10 would, if something came up and was like something to  
11 be aware of, then they would generate it and send it to  
12 the office.

13 MR. YOUNG: Okay.

14 MR. LEVESQUE: And then there should be a  
15 sheet that, I mean, I think they should have a sheet  
16 that you see all around the ships that list the, you  
17 know, their risk assessment.

18 So it's kind of like, you know, even if  
19 it's, you know, it's good, you know, you're thinking  
20 about it. So sure, not each ship is being aware of the  
21 safety on the ship. So you'll see that recording. I  
22 guess, is that right (inaudible), if I'm not mistaken?

23 MR. YOUNG: Like a matrix?

24 MR. LEVESQUE: Not so much a matrix. But it  
25 shows you the risk management from, to the ships. I

1 thought I seen it in the hallway.

2 MR. FISKER-ANDERSON: Yes, yes. We do, we  
3 try to.

4 MR. YOUNG: And again, we're not trying to  
5 put you through an audit. We're just trying to get a  
6 picture painted of the pretty much safety culture on  
7 the ship using the SMS, and how it was utilized. Good.  
8 I'll pass it around the table about SMS.

9 MR. O'DONNELL: No further questions.

10 MR. YOUNG: Nothing?

11 MR. O'DONNELL: No.

12 MR. YOUNG: All right.

13 [REDACTED] In regards to the safety  
14 meetings outside of the engineering department. Did  
15 you participate in safety meetings as a crew?

16 MR. LEVESQUE: Oh, absolutely. There was a  
17 certain, that was done based off of requirements that  
18 we needed so much training in certain areas. I can, a  
19 matrix, or something to that. Or if we need, you know,  
20 every, you know, depending on what was needed we'd have  
21 either a fire and boat drill, then have a safety  
22 meeting afterwards.

23 And they would go over anything from  
24 defibrillator to putting on a survival suit, CPR, STDs,  
25 you know. Just, but it was based off what needed to be

1 done. They would always, you know, keep a record of  
2 that, keep it up to date.

3 [REDACTED] Okay. And do you recall the  
4 last audit, internal audit with the safety management  
5 system? Were you onboard when that happened with the  
6 DPA (phonetic)?

7 MR. LEVESQUE: I can't remember.

8 [REDACTED] Can't remember. How often would  
9 you say the DPA visits the ship? And how often do you  
10 see them onboard?

11 MR. LEVESQUE: I can't remember seeing them.  
12 I'd have to, maybe it's every six months they audit. I  
13 don't know.

14 [REDACTED] Outside of the audits did he  
15 make it a habit of visiting the ship and --

16 MR. LEVESQUE: Sometimes I don't really see  
17 people. Sometimes I'm busy down below all the time. A  
18 lot of times I don't even see people from the office.  
19 They usually go to the captain's office.

20 [REDACTED] And regarding the safety  
21 meeting, I'm good.

22 MR. YOUNG: Okay. Everybody all set? All  
23 right. Thank you. What I wanted to do was change  
24 gears a little and get down into the engine room, and  
25 maybe go through some of the critical machinery. And

1 give us a description maybe of certain pieces of  
2 equipment such as the boilers.

3 Let's start with the boilers. If you would  
4 maybe give us a little bit of a history of the boilers,  
5 how they're running, the maintenance that, outstanding  
6 maintenance that may be out there, or anything unique  
7 to these, so we can kind of get a better understanding  
8 of how these pieces of machinery are operating.

9 And what we're looking at is, we'll start  
10 with the boilers, then the main engines and reduction  
11 gear set, the turbo generators, and the emergency  
12 generator. Those are the things we're kind of focusing  
13 on.

14 You know, at some point out there the ship  
15 lost power, or lost propulsion. We don't know. And  
16 again, we're trying to see how these pieces of  
17 machinery were operating, and what could have possibly  
18 gone wrong. So, if we start with the boilers.

19 You just give us an overview of how they  
20 operate, educate us a little. And then maybe go into  
21 any issues that you may have seen over the many years  
22 you've been on the ship. So let's start with the  
23 boilers.

24 MR. LEVESQUE: We have two Babcock Wilcock  
25 (phonetic) type, D type boilers, 900 pounds, natural

1 circulation. Three registers in each boiler. Forced  
2 air fan for each boiler. And then you have crossover.  
3 Maintenance, you know, once a tour with the chief we --  
4 I mean, is that good, enough information about the  
5 boilers?

6 MR. YOUNG: Maybe a little bit of the  
7 automation on how it operates?

8 MR. LEVESQUE: Oh. Well, the automation,  
9 well, they were done by Nortek (phonetic), which is the  
10 boiler management system. And they were manually  
11 fired. They used to have an auto sequence on there,  
12 but that wasn't working. Or, yes, it wasn't working.

13 So everything, fires were done manually.  
14 The automation was controlled by TMS for the rest of  
15 the plant. But the actual boiler management system was  
16 by Nortek, or Norcom (phonetic).

17 And the boiler fronts, they have air  
18 actuated lans (phonetic) with the vasco (phonetic)  
19 valves supplying the pneumatic, or the pneumatically  
20 operated -- You know, you have your three burners in  
21 there that tog in (phonetic) the fuel.

22 And, but you could, they light in manually.  
23 You're refueling steam, I mean, your steam open to your  
24 burners at all times. Once, if there's a fire lit, and  
25 then when you light the fire, you know, the fuel valve

1 will open.

2 Well, you have the igniter that goes in, the  
3 fuel will open a light, and then you damper your  
4 register doors all open. And then you'll see on your  
5 boiler management you'll have a flame in the  
6 (inaudible) you have fired.

7 And if it doesn't light you'll get an alarm.  
8 And then you got to try again. Sometimes there's a  
9 glitch. But it does, you know, they worked 99 percent  
10 of the time.

11 MR. YOUNG: Maybe safety features of the  
12 boiler. What kind of shut downs --

13 MR. LEVESQUE: What we got --

14 MR. YOUNG: -- you have.

15 MR. LEVESQUE: Well, you got four safety  
16 valves on the boiler. You got, well actually on the  
17 main, on the drum you got two safeties and one pilot  
18 safety. And, but the pilot safety will operate, once  
19 that operates that opens up the safety at the steam  
20 stop.

21 So you have, you maintain flow through your  
22 super heated tubes. So you don't, if you saw the fire  
23 in there you don't (inaudible) them. You got soot  
24 blowers in there, that they're usually, they're  
25 operated twice a day, so you don't accumulate too much

1 soot, which actually can (inaudible) and can melt down  
2 your boiler.

3 So that uses high pressure steam to blow  
4 soot off. And you have your fan running on high. And  
5 that will blow out the soot from the stack. You have  
6 your, you got to worry about your chemicals in your  
7 boiler. And then you monitor that.

8 You do it for, chlorides start creeping up  
9 on you. You got to do periodic surface blows. Then  
10 once a month we would do bottom blows to maintain the  
11 TDS in the boiler.

12 What else. Let me see. You'll have a jack  
13 if you have an issue with the safeties, and then on  
14 upper. And you have a manual jack on there, which is a  
15 valve that, it's all tied in by cable, that will lift  
16 the lifting arm on your safety valves. And that will  
17 release the pressure in the boiler if for some reason  
18 that your pressure's creeping up on you. I'm trying to  
19 think. I mean --

20 MR. YOUNG: Maybe some of the features that  
21 could shut the boiler down?

22 MR. LEVESQUE: Well, you have your, if you  
23 lost your forced air fans you lose your fires. If your  
24 water level got too high you'd lose your fire. Oh, I'm  
25 sorry, if your water got too low you'd lose your fires.

1                   And then if it got too high you'd get the  
2 alarm. And then you'd have to kill your fires, and  
3 then do a surface blow to get the water out. What else  
4 is there? I mean, high water, low level, low water  
5 level, high water level, loss of fire, high steam  
6 pressure, low steam pressure, loss of forced air fan.

7                   MR. YOUNG: If you hit low, low water level

8 --

9                   MR. LEVESQUE: That will kill your fire.

10                  MR. YOUNG: Is there any delay in there?

11                  MR. LEVESQUE: Any delay?

12                  MR. YOUNG: Yes. If the ship is rolling  
13 around and you hit a low, low water level, do you know  
14 if there's a extended --

15                  MR. LEVESQUE: A timer on it?

16                  MR. YOUNG: Yes.

17                  MR. LEVESQUE: At a low, low, no. It should  
18 kill the fires on a low, low. But the low level  
19 (inaudible) should have a timer on there. Because you  
20 do have a, the ship does roll. And you might get a,  
21 you know, the reading where it's at might get a false  
22 low for a second, and then clear up. So you  
23 (inaudible) timer so you don't have the alarm going off  
24 all the time.

25                  MR. YOUNG: Right. But on a low, low you

1 don't believe that there's a time --

2 MR. LEVESQUE: (Inaudible) longer ship code  
3 fire.

4 MR. YOUNG: Why not?

5 MR. LEVESQUE: Because you don't, I mean,  
6 that's something, if it gets to that point you don't  
7 want to take a chance on melting your boiler down.

8 MR. YOUNG: Do you know the approximate time  
9 of the delay on the low level alarm?

10 MR. LEVESQUE: Approximate, I mean, I'm  
11 thinking eight seconds.

12 MR. YOUNG: In the many years you've been on  
13 the ship have you experienced many, or any problems  
14 with any of these boilers, either of these boilers, of  
15 note?

16 MR. LEVESQUE: I'm trying to think right  
17 now. Yes, I mean, you could have issues with high  
18 super heat. Or carbon building up because of the, you  
19 know, your distance isn't set properly in registers.

20 You know, you get leaky hang hold (phonetic)  
21 gaskets in your super heater. Periodic, you know, I  
22 mean, I've seen tube leaks in the water tubes in the  
23 furnace. But nothing major, I mean. Like, but, I  
24 mean, actually, a number of years ago, I mean, those  
25 boilers had been retubed. Just, I mean, (inaudible).

1 I can't, I -- What was the question again?

2 MR. YOUNG: Have you had any issues with the  
3 boilers that they failed?

4 MR. LEVESQUE: They failed? Define failed.  
5 Like, just --

6 MR. YOUNG: Shut down? Complete shut down?

7 MR. LEVESQUE: A complete shut down?

8 MR. YOUNG: Yes.

9 MR. LEVESQUE: Yes. We, I mean, like, I  
10 lost the force draft (phonetic). Well, this was in  
11 port, like when I switching from high, the low to high  
12 speed on it. Contacts they had closed.

13 And somehow burnt leads up on the pecker  
14 (phonetic) head on the forced draft fan motor. Or was  
15 that the Faro or the Morro? No, I think that was the  
16 Morro. I'm sorry. The Faro, if they shut down. I  
17 can't think of anything right now.

18 MR. YOUNG: Okay. Thank you. I think I'll  
19 pass it around the table. Any other boiler questions,  
20 or operation, or maintenance (inaudible)?

21 MR. O'DONNELL: When you do your -- Sorry,  
22 Louis O'Donnell, with ABS. When you seconded his major  
23 bar blows, you know, probably, I don't know, once a  
24 month, whatever, in port, did you guys test both low  
25 and low, low water level sensors when you do that?

1 MR. LEVESQUE: They were done, because you  
2 blow the boiler. Not the low, you get a low level of a  
3 --

4 MR. O'DONNELL: Yes.

5 MR. LEVESQUE: -- a low alarm because you're  
6 blowing both down.

7 MR. O'DONNELL: Okay. But you wouldn't go  
8 all the way down --

9 MR. LEVESQUE: No.

10 MR. O'DONNELL: -- to low, low, and test the  
11 low, low? Like, physically test the low, low?

12 MR. LEVESQUE: No, not all the time, no. It  
13 was like we --

14 MR. O'DONNELL: Periodically you would?

15 MR. LEVESQUE: Periodically.

16 MR. O'DONNELL: You mean quarterly, or  
17 something like --

18 MR. LEVESQUE: Periodically we would.

19 MR. O'DONNELL: Yes, okay. Okay. Do you  
20 consider the Norcom boiler emission pretty reliable?

21 MR. LEVESQUE: It was reliable.

22 MR. O'DONNELL: Yes?

23 MR. LEVESQUE: I mean, it had its bugs.

24 But, I mean --

25 MR. O'DONNELL: Yes.

1 MR. LEVESQUE: It was reliable.

2 MR. O'DONNELL: Okay.

3 MR. LEVESQUE: It was older. I'd prefer a  
4 more modern system. But it was an older pneumatic.  
5 You had the typical hair leaks on the boiler front.

6 MR. O'DONNELL: Okay. How about your fuel  
7 to air ratio, fuel controllers, water level  
8 controllers?

9 MR. LEVESQUE: That was by TMS.

10 MR. O'DONNELL: TMS, all by TMS? Okay. So  
11 the -- Okay. So you had a mix of the TMS and Norcom?

12 MR. LEVESQUE: Correct.

13 MR. O'DONNELL: Okay. Okay. You mentioned  
14 the boilers were retubed? You said a few years back --

15 MR. LEVESQUE: I (inaudible).

16 MR. O'DONNELL: Do you happen to know when  
17 the last time the boilers was retubed?

18 MR. LEVESQUE: I can't remember that.

19 MR. O'DONNELL: Okay. That's all I have.

20 Thank you.

21 MR. YOUNG: [REDACTED].

22 [REDACTED] [REDACTED] with the Coast Guard.

23 Did you ever have any issues with fuel, with the boiler  
24 fuel system, bunkers, or anything like that?

25 MR. LEVESQUE: You get dirty fuel. I mean,

1 if you have dirty fuel that's going to effect the fuel  
2 system with more periodic cleaning of the strainers, or  
3 your fuel heaters getting fouled up.

4 But the fuel system itself, or your, some,  
5 or you would just need, maybe do a cleaning on your  
6 fuel regularly, or at your boiler front. But nothing  
7 we couldn't, you know, effect the complete operation.  
8 Well, it would affect the plant. But you'd have to  
9 clean it, you know, regular maintenance done on the  
10 system, because if the fuel was bad.

11 [REDACTED] Can you briefly just describe to  
12 us how the bunker works, what's (inaudible) how the  
13 arrangement was for --

14 MR. LEVESQUE: Well, on the --

15 [REDACTED] -- the fuel?

16 MR. LEVESQUE: Yes, you had, on the Faro you  
17 had three inboard double bottoms, and 2 A inboard  
18 double bottoms. They were your, you know, storage.  
19 And then you had your settler. And when you bunkered  
20 you took it on on the port side through an eight inch  
21 line. And that would come in.

22 And you would direct it to wherever, most of  
23 the time it was three double bottoms, because that's  
24 what they would suck out of. Because they would fuel  
25 every week. So they would top those off.

1                   And then we'd top off the settler in the  
2 same time. Because they have this, the stand pipe you  
3 go through. So while you're filling the double bottoms  
4 you're also filling your settler through the stand  
5 pipe.

6                   And then the fuel system would take a  
7 suction off your settler, and you'd have a high and low  
8 suction on that. And then that would come off and go  
9 through a suction strainer, go suction strainer, fuel

10                   No, suction strainer, pump, heater,  
11 discharge strainer, then it would go to your boiler  
12 front through a fuel regulator. And then that would go  
13 to your individual burners that we're using.

14                   ██████████ And you normally draw high or  
15 low?

16                   MR. LEVESQUE: Normally after low.  
17 (Inaudible), you know, I mean, you go off the low. And  
18 if you have issues with water in your fuel, or some  
19 sort of a suction problem you go to your high.

20                   ██████████ So any oil analysis testing, or  
21 anything, that ever --

22                   MR. LEVESQUE: Oh, yes. Every time we take  
23 on fuel we get a sample from the barge. And we keep  
24 that on for at least six months. And we have it stored  
25 down in the engine room, you know, every, you know,

1 they have it all on a shelf there.

2 And it's got the label on it, and the ship's  
3 stamp, and what company we got the fuel from, all the  
4 stats on the fuel. And that, chief keeps all the  
5 information in his office.

6 [REDACTED] Would you happen to recall the  
7 last hydro test on the water, when that was performed?

8 MR. LEVESQUE: (Inaudible).

9 [REDACTED] Were you onboard when it was  
10 performed? Don't need an exact date, or anything.  
11 Were you there when they did the hydro?

12 MR. LEVESQUE: I've been on there. The last  
13 hydro I -- No, I wasn't on there when they broke the  
14 ship. I don't know if they did a hydro when they broke  
15 the ship out or not. I don't think they did. But I  
16 wasn't on there.

17 [REDACTED] Okay.

18 MR. LEVESQUE: And if I was -- I've been  
19 there on hydros. But I can't remember the last time it  
20 was done. So I can't answer that correctly.

21 [REDACTED] Okay. (Inaudible).

22 MR. YOUNG: Good, good. You doing all  
23 right? You need a break or anything?

24 MR. LEVESQUE: I'm fine.

25 MR. YOUNG: Okay. Anything else that you

1 can remember with the boiler, in terms of describing  
2 it, or any sorts of maintenance issues?

3 MR. LEVESQUE: The only thing I know right,  
4 was currently at, was the, you know, (inaudible) had  
5 the front water wall tubes. They were starting to bow  
6 out. And they were having Walcheck (phonetic) come in  
7 do an inspection to see the extent of the repairs  
8 needed to get done when the ship was going in the yard.

9 And all I know is they had to clean the  
10 furnaces before they did an inspection. And that was  
11 just from a conversation I had with Keith before I was  
12 coming back to the ship, why it was done. I mean,  
13 other than that the boilers were running fine.

14 MR. YOUNG: And would you typically run at  
15 sea with both boilers?

16 MR. LEVESQUE: Absolutely. Absolutely. You  
17 can't get up to speed, you know, your sea speed without  
18 having two boilers. One boiler's only going to operate  
19 around 80, maybe 85, 90 rpm, depending on the load on  
20 the ship. (Inaudible) you'd only go to one boiler.

21 If we were going northbound to Jacksonville,  
22 we're cleaning one boiler at sea, we'd go down to one,  
23 you know, we'd have one boiler on line, and maintain 85  
24 rpm, 84 rpm. And then until we got done cleaning. And  
25 then we'd dry it out and put it back on line before we

1 get into port, before we maneuver.

2 And we would never come, unless it was -- I  
3 can't even think of an emergency. We would never come  
4 into port on one boiler, I mean, if we could help it.

5 [REDACTED] Right.

6 MR. LEVESQUE: If the boiler's ready to go  
7 on line we'd have that on line at all -- Both boilers  
8 are on line at all times, unless we was doing a  
9 cleaning, or some other situation where we, prevented  
10 us putting it on line. But most of the time that I can  
11 recall the boilers were on line as needed.

12 MR. YOUNG: If you can do 85 rpm on one  
13 boiler, what could you, what would your speed be on  
14 two?

15 MR. LEVESQUE: On what, two?

16 MR. YOUNG: Two boilers, yes.

17 MR. LEVESQUE: We could do 120, I mean 122.  
18 That speed varies depending on the load on the ship.  
19 How much, you know, our drafts, and what's, you know,  
20 what's the weather conditions, how fast you can do.  
21 But normally we do about 118.

22 MR. YOUNG: 118?

23 MR. LEVESQUE: 118 going southbound. Could  
24 be a little bit fast, what we can get out of the  
25 blowers. But, you know.

1                   MR. YOUNG: Now, if we could shift from the  
2                   boilers to the main turbine set and the reduction gear?  
3                   That may be considered as the propulsion for the ship.  
4                   Can you give us a brief description of that? And then  
5                   kind of go through the same thing, if there are any  
6                   maintenance issues or failures.

7                   MR. LEVESQUE: Maintenance issues? Well --

8                   MR. YOUNG: No. First a description of it.

9                   MR. LEVESQUE: Well, the pure fire's on it  
10                  all the time. And that's, you know, any water getting  
11                  in the tube wall, because of (inaudible) steam. But  
12                  that's on 24 hours a day, unless it's down for a  
13                  cleaning.

14                  And then you might have a couple of the  
15                  bubblers indicating flow to your bearings. It might  
16                  have a small leak. But nothing that could stop the  
17                  operation of the main unit. Then with it you may have  
18                  the main turbine. The turbines and the reduction gear,  
19                  you know, they --

20                  Besides that you don't really mess with  
21                  them. Because they're, that's the main thought, you  
22                  know, anybody touching that has to be an experienced  
23                  turbine guy, to do any inspections on the turbines and  
24                  the couplings.

25                  But my maintenance, you know, fixing a

1 gasket leak, or something like that, that was, we could  
2 do that. But you'd have to turn the (inaudible) system  
3 off. So it's not like an easy fix.

4 But really, the cost of maintenance is the  
5 purifier on the main sump. On the waterside you have  
6 the main condenser. And then we, every month, well,  
7 depending on the readings, you'd have to clean the --  
8 That would dictate your frequency on the condenser  
9 cleaning.

10 I know before I got off we had one of the  
11 expansion joints on the condensate pump suction had a  
12 crack in it. So we had to change that out. Any other  
13 maintenance, it's, you don't, I mean, maintenance is  
14 just cleaning on the condenser.

15 Then you have a saline system seeing if you  
16 have any tube leaks. And if it's not, you're not  
17 indicating any alarms, then you should be fine. And  
18 then the second, he'll do a, he does a test, a  
19 (inaudible) test on the condensate system once a day.

20 So you're constantly monitoring the salinity  
21 in the steam cycle, I mean the water cycle coming when  
22 the steam condenses to make sure that your tubes are  
23 fine. You have the main --

24 And then some, greasing the linkage comes up  
25 on AMOS, on the throttle. You have greased zinc

1 (inaudible) fans there. You got to grease that. Then  
2 we exercise the manual jacking gear for the throttle.  
3 There's hydraulic jacks that are tied on cables on the  
4 throttle. You have the head and the stern.

5 And we just, you know, we pressurize that to  
6 lift it up. This one steams off the engine if we're in  
7 port. Just to make sure that it is working and you can  
8 lift it up. That's like extreme measures when you use  
9 that.

10 Because there's other, another redundancy to  
11 direct drive on. But you only goes, that hand jack  
12 pumps when you really need to. Then you can go over  
13 and jack open a throttle with a pipe, which is  
14 (inaudible). I'd say it's a lever that you're able to  
15 jack open the throttle if you need to in case of an  
16 emergency.

17 Like if you did have loss of oil, and you  
18 need to stop the engine real quick, go over there and  
19 open up your stern to stop the ship. Because you don't  
20 want to, you know, you only got eight minutes off the -  
21 -

22 If you lose lube oil you got eight minutes  
23 off your gravity tank to stop the main engine from  
24 turning, so you don't wipe out your bearings. Because  
25 those bearings, the backup bearings, they don't have

1 the durability of say regular ball bearings or roller  
2 bearings, you know, your backup line bearing.

3 I mean, it's something that's -- Make sure  
4 you always got oil going down your bullseye from your  
5 gravity tank. Because if you don't, you're shit out of  
6 luck there. What else? (Inaudible). Make sure you  
7 steam stop, I mean, you know, your steam, stop and  
8 close it, it's shut off.

9 Make sure it's not leaking (inaudible). And  
10 then if it is then you got to make sure that valve is  
11 pulled when it's in the yard. They got to refurbish  
12 it. I told you about the greases on the linkage. And  
13 you exercise it.

14 Every time I'm taking standby, before I take  
15 standby I test the throttle and make sure it works with  
16 the direct frog (phonetic) and then the (inaudible).  
17 Making sure that the throttle's moving up and down.  
18 And what else? You know, exercise the valves as  
19 needed, you know.

20 But the maintenance, it's, [REDACTED] know, it's  
21 self contained. I mean, that's -- But it's not a whole  
22 lot of maintenance we do on it. But just the regular  
23 greasing and operations of it.

24 MR. YOUNG: The LUBO (phonetic) system, if  
25 you would refresh my memory. It takes suction from the

1 sump? And is there an electric pump?

2 MR. LEVESQUE: Yes. There's two electric  
3 pumps.

4 MR. YOUNG: Two electric. Any steam pump --

5 MR. LEVESQUE: No.

6 MR. YOUNG: -- backup? And if one of the  
7 LUBO pumps is running and loses suction, is the other  
8 one on a standby?

9 MR. LEVESQUE: Well, yes. There's, yes, the  
10 other should kick on. Because you have a switch that  
11 controls the lead, the lead pump, you know, which one's  
12 on the lead. So you have the lead, and the one, the  
13 backup. So if the one pump loses pressure, the  
14 pressure drops off, first you get an alarm, so low LUBO  
15 pressure. Then you have another alarm that will kick  
16 on the other pump.

17 MR. YOUNG: Right.

18 MR. LEVESQUE: And then that pump will come  
19 on. And you got your pressure gauge at the console.  
20 You got one for discharge pressure from the pump. And  
21 then you got one pressure gauge reading you your  
22 throttle.

23 MR. YOUNG: Okay. And do you know where  
24 that pump takes suction from within the reduction gear  
25 set?

1 MR. LEVESQUE: Where exactly?

2 MR. YOUNG: Whether it's center line, port,  
3 starboard?

4 MR. LEVESQUE: I think it more, because I  
5 can see it, probably from the middle, like right near  
6 the -- I can see it coming off. And it goes over  
7 towards the shaft, and then goes into the sump. So I'd  
8 say closer to center line.

9 MR. YOUNG: Close to center line? And if  
10 you lose both pumps, then you have your gravity tank,  
11 correct?

12 MR. LEVESQUE: Yes. That's your last backup  
13 for that. You know, that means you got eight minutes  
14 to stop those engines from turning.

15 MR. YOUNG: That's all I've got on the main  
16 unit. Go around the room for main unit. He gave you a  
17 description and maintenance that was performed. And  
18 very little. That's okay. Very little that could go  
19 wrong with it. Apparently there's very little  
20 maintenance.

21 MR. LEVESQUE: Well, they're solid  
22 generators. And when you do what the frequency of the  
23 inspection for the couplings are. And then you have  
24 your temperature monitors of your bearings. And then  
25 they have a, they check the quality of the oil coming

1 out of your purifier.

2 Well, they do oil samples on that, you know,  
3 basically based off your LUBO chart, and the cycle of  
4 taking samples and sending them to shore to see, have  
5 to see how much water's in there, if the purifier's  
6 working properly.

7 MR. PETERSON: Okay. This is Lee Peterson.  
8 I got a couple of things maybe you could address,  
9 Chris. Good to see you, by the way. Maybe [REDACTED] could  
10 also talk about the, speak to the high speed coupling  
11 maintenance, and then, and also the vibration monitor  
12 that goes on those units?

13 MR. LEVESQUE: Yes. I mean, AMOS, we've got  
14 a, I think it's, it comes up in an annual inspection.  
15 And you look at the, what you do is, you get a  
16 contractor comes in, and they assist you. And we pull  
17 the, open up, we have to secure the LUBO on the system.

18 So we go over to the auxiliary plant. And  
19 then that allows us to secure the turning gear, shut  
20 the steam off to the main unit. And we pull the cover  
21 on the HP coupling. And it's inspected. It's cleaned.  
22 And we'll make sure that if that coupling's showing  
23 signs that the flex coupling isn't --

24 If you're able to move it then it's a good  
25 sign that the (inaudible) coupling is good. So based

1 off the inspection of the HP, that will affect the  
2 inspection on your LP coupling. And the last time we  
3 inspected it was clean.

4 MR. PETERSON: When was that?

5 MR. LEVESQUE: Oh, I can't remember the  
6 date. I can't remember the date.

7 [REDACTED] Was it during your last  
8 turnover?

9 MR. LEVESQUE: No, no. This was, I don't  
10 know if it was last year. But I was on there. I think  
11 I was on the last time they did a coupling. I can't  
12 remember the frequency. I thought it was a year, but  
13 maybe not. (Inaudible).

14 But I know, I mean, I remember doing it  
15 twice on there. And both times it was good. I mean, I  
16 don't think, I haven't seen the -- I mean, if they did  
17 the LP they did it in the yard. But the HP's usually  
18 really good on that.

19 And the vibration analysis. Yes, they just  
20 did the vibration analysis recently on the ship. I do  
21 know that the, you know, the guy, the outside  
22 contractor comes in, and he goes around all the motors.  
23 And I have to go, you know. He puts the sensors on  
24 there, he does his analysis on it, takes the reading.

25 And we go around to all the equipment that's

1 running. And then like I swap over the other, you  
2 know, the same equipment, so he can do the test and do  
3 the report. And there was a little excessive vibration  
4 in one of the bearings on the reduction gear. But it  
5 wasn't enough to cause an alarm. I think they were  
6 going to look at it in the yard maybe.

7 But, you know, that vibration is huge.  
8 Because it will tell you if your bearings are going  
9 bad. It's, I mean, it's really, it saves you a lot of  
10 headaches down the road. Because if you don't have  
11 equipment failing, this type of test, I mean, they give  
12 you big heads up on, I mean, forced air fans.

13 You know, knowing that those bearings, you  
14 know, they're showing excessive vibration. You should  
15 consider, you know, they'll say consider, or you need  
16 to do this based off the extent of the test, or the  
17 extent of the readings. But that, those tests will  
18 save you a lot of issues down the road.

19 That and the thermo test too, you know.  
20 Like the guy will come down and do a heat reading on  
21 all your motors. And they'll show you the hot spots.  
22 And, you know, they'll give you the report. And when  
23 he's done there's, you know, we go around and correct  
24 any issues.

25 He'll have it rated on the extent of the

1 severity of the issues. And you address them. And  
2 you're not getting motors burning up. You're catching  
3 it ahead. So there wasn't a lot of motors burning up.  
4 I mean, if it did it was a rarity.

5 A lot of times we'd always catch it up.  
6 We'd do it at the motors, and right at the pecker  
7 heads. And then you go to the motor control boxes and  
8 do thermo tests on that. And have a picture, and an  
9 arrow showing this lead is hot. You need to clean it  
10 or address it. And then they were doing that anyway.  
11 So --

12 MR. PETERSON: It's good stuff.

13 MR. LEVESQUE: That was part, that's part of  
14 AMOS too.

15 MR. YOUNG: This is Bryan Young again, NTSB.  
16 Do you know the name of the company that does the  
17 vibration analysis, off the top of your head?

18 MR. LEVESQUE: No.

19 MR. YOUNG: Okay. Is it the same company  
20 that does the thermography --

21 MR. LEVESQUE: No.

22 MR. YOUNG: -- or someone else?

23 MR. LEVESQUE: No.

24 MR. YOUNG: Okay.

25 MR. O'DONNELL: Louis O'Donnell, ABS. Just

1 a couple of quick questions. Do you ever do any, as  
2 part of PMs or exercising, emergency maneuvering  
3 drills, anything like that, with the --

4 MR. LEVESQUE: Oh, every time, well, if  
5 we're, excuse me. If we were coming in to maneuver, I  
6 was a part of doing a stern test before we take  
7 arrival.

8 MR. YOUNG: The standard arrival tests.

9 MR. LEVESQUE: Yes. I would go, I mean, I  
10 would slow down. And then I'd go and start on the  
11 throttle.

12 MR. O'DONNELL: Yes.

13 MR. LEVESQUE: You'd see the ship slow down,  
14 and then I'd bring it back up to speed.

15 MR. O'DONNELL: Yes.

16 MR. LEVESQUE: And then I would call back,  
17 they would call on the bridge, you ready to do the  
18 stern test. Yes. Hang up. Do my test.

19 MR. O'DONNELL: Yes.

20 MR. LEVESQUE: Sometimes I would talk to  
21 them directly. Or I would call back and say, did you  
22 get that? It's good. Yes, we're happy with it.

23 MR. O'DONNELL: Yes.

24 MR. LEVESQUE: And then that was it. That  
25 was the, you know, the throttle test before --

1 MR. O'DONNELL: Okay.

2 MR. LEVESQUE: -- arrival.

3 MR. O'DONNELL: All right. I apologize. I  
4 had to excuse myself for -- I understand you also  
5 talked about the TG sets too?

6 MR. LEVESQUE: Not yet.

7 MR. O'DONNELL: Oh, okay. Okay. We're just  
8 on the main. Do you remember the last time you looked  
9 inside the LP casing? Maybe on one of your tours? Was  
10 it something --

11 MR. LEVESQUE: Well I -- No, it's not  
12 something you do very often.

13 MR. O'DONNELL: Yes.

14 MR. LEVESQUE: If you were, if it was just  
15 doing a visual inspection you had someone, a contractor  
16 coming to do a visual inspection.

17 MR. O'DONNELL: Okay.

18 MR. LEVESQUE: Or you were maybe, open up  
19 the LP. That wasn't done too often. I mean, we --

20 MR. O'DONNELL: Yes.

21 MR. LEVESQUE: It was done more maybe  
22 cooling, maybe to cool something down.

23 MR. O'DONNELL: Yes. Maybe not when you  
24 checked in the condenser, you guys cleaned the  
25 condenser, and they didn't check the LP?

1 MR. LEVESQUE: No. We don't, we wouldn't do  
2 that unless it was necessary, because it's hot, you  
3 know. It's still hot. And you still, you secure your  
4 gland (phonetic) seal. But then, no, we wouldn't touch  
5 the LP.

6 MR. O'DONNELL: Okay.

7 MR. YOUNG: Going on. [REDACTED]

8 [REDACTED] [REDACTED] with the Coast Guard.  
9 So just, I want to make sure I understand this  
10 correctly. You said that the last vibration analysis,  
11 or testing you did, indicated that you were on the edge  
12 of one of the reduction gear bearings being --

13 MR. LEVESQUE: Well, it was, it showed signs  
14 of excessive vibration. But, you know, it wasn't  
15 enough to cause like immediate attention.

16 [REDACTED] Right. So you got to, were  
17 going to do that most likely --

18 MR. LEVESQUE: My understanding -- Well, I  
19 don't know if they fully had decided to do it in the  
20 yard or not. But they were aware of it.

21 [REDACTED] It wasn't at the point to where  
22 it was --

23 MR. LEVESQUE: No. It wasn't enough to be --

24 [REDACTED] -- other than (inaudible).

25 MR. LEVESQUE: No. It wasn't setting off,

1 we didn't have alarms. We weren't bypassing an alarm  
2 because we knew it was hot.

3 [REDACTED] Right.

4 MR. LEVESQUE: But we kept -- Bless you.

5 [REDACTED] So with regards to the  
6 propulsion in its entirety, what, have you been onboard  
7 during heavy weather?

8 MR. LEVESQUE: Yes.

9 [REDACTED] So, would (inaudible) with the  
10 screw, or anything like that, cause --

11 MR. LEVESQUE: It would slow down. It  
12 wouldn't keep the same speed. You'd slow down because  
13 it was just, it was too much weather. You were putting  
14 too much stress on the engine.

15 [REDACTED] Okay.

16 MR. LEVESQUE: And so you would slow down.  
17 And they would direct it to a point where hopefully you  
18 weren't getting too hammered by the sea.

19 [REDACTED] You have ever any problem in  
20 heavy seas losing suction, or anything?

21 MR. LEVESQUE: Suction? No.

22 [REDACTED] No. Just --

23 MR. LEVESQUE: That's something I would  
24 remember if we lost suction because of heavy seas.  
25 Because then you're affecting your throttle. But no.

1 [REDACTED] Right. Okay.

2 MR. O'DONNELL: Excuse me. Lou O'Donnell.

3 But even in heavy seas, if you were taking heavy rolls  
4 I know the captain would always probably try to put in  
5 ahead sea so you wouldn't be taking rolls. You don't  
6 ever recall having a problem with the suction on the  
7 main engine?

8 MR. LEVESQUE: No.

9 MR. O'DONNELL: Okay. Thank you.

10 MR. YOUNG: [REDACTED] go ahead and (inaudible).

11 [REDACTED] So, did any of the rolling, or  
12 any of the heavy seas have any effect on any of the  
13 propulsion equipment that you had to do any type, make  
14 any measures, or anything to address?

15 MR. LEVESQUE: No. I mean, you would, the  
16 rolling, if you had anything from the plant or the  
17 boilers, I mean, you would like, like if you had a roll  
18 or something you might get a low level in your boiler,  
19 because it was, you rolled.

20 But then, you know, the timer was set, maybe  
21 the timer was too, it wasn't long enough. Because you  
22 have a roll, and the roll might take a little bit  
23 longer than others. You might get that one. But,  
24 think, think, (inaudible). What, you're asking me what  
25 else would be affecting the plant by a roll in heavy

1 seas?

2 [REDACTED] Anything that you're aware of,  
3 or any, from your experience on any (inaudible) El  
4 Faro. The heavy seas, any systems that would be  
5 affected.

6 MR. LEVESQUE: Oh, okay. The whole, I mean,  
7 yes, your LUBO. Not your LUBO, you're fuel. I mean,  
8 you can agitate your assembler. You got a lot sitting  
9 -- Sometimes depending on the quality of the fuel you  
10 get sediment in there.

11 And that will foul up your suction strainer.  
12 And then you get (inaudible) you could foul up your  
13 fueler heater. And then foul, I mean, fueler heater  
14 might be probably the last things. Because that's a  
15 gradual. It's not going to be all of a sudden unless  
16 you have real crappy fuel. But the suction --

17 [REDACTED] The sediment would.

18 MR. LEVESQUE: The, well the suction  
19 strainer, you would see it in your suction strainer.  
20 You know, you have differential gauge there. And it's  
21 monitoring your pressure drop across the strainer. And  
22 that one would, that could get fouled up.

23 And then your suction, or your discharge  
24 strainer, which is a finer strainer, that one would  
25 probably get fouled up quicker than the suction,

1 because it's a coarse. And then you could see that, if  
2 you're at the throttle you can see your fuel pressure  
3 gauge.

4 And the pressure will actually start  
5 creeping up because your pressure sensors, entrance at  
6 the beginning of the, or the inlet of the strainer. So  
7 if your pressure's coming up you know it's getting  
8 fouled. You don't have to go down there and look at a  
9 differential gauge.

10 And I usually pass that information to the  
11 watch stander if it's anybody new. I'll be saying,  
12 watch that. If that starts creeping up it's indicating  
13 you got a dirty strainer. And, or also if your suction  
14 strainer is getting fouled, your pressure will start  
15 dropping off.

16 But that's, as it got to a point where it's,  
17 you actually lost fires because your suction dropped  
18 off. You'd catch it because you always should be  
19 making rounds every hour. And then you got a gauge  
20 down there. And that's cleaned as needed. Usually the  
21 second will keep an eye on that. And your discharge  
22 drainer is monitored. Well, they're monitored every  
23 watch, you know, every hour watch.

24 [REDACTED] So if you're in heavy seas for a  
25 prolonged period of time, and the sediment becomes an

1 issue --

2 MR. LEVESQUE: Got to clean the strainer.  
3 And keep it clean.

4 [REDACTED] You're just constantly cleaning  
5 your strainers --

6 MR. LEVESQUE: Well yes, depending --

7 [REDACTED] -- (inaudible).

8 MR. LEVESQUE: -- on how the frequency of  
9 they're getting fouled up. But yes. There's nothing  
10 you can do. The sediment's in the strainer. That's  
11 where you're sucking from. And it's not -- I mean, you  
12 could probably, maybe --

13 [REDACTED] Can you walk us through how you  
14 would mitigate that if you were in heavy seas? How  
15 would you deal with that situation, specifically this -  
16 -

17 MR. LEVESQUE: Well, you --

18 [REDACTED] -- in detail.

19 MR. LEVESQUE: Your sediments, I mean, it's  
20 not, I mean, your fuel suction's not taking, it's not  
21 like sitting on the bottom of the tank. I mean, you  
22 got a space there between the bell mouth and the  
23 suction pipe. And you got sediment in your fuel.

24 [REDACTED] You said you were taking suction  
25 from the low --

1 MR. LEVESQUE: Yes. You're on your low  
2 suction. I mean, usually you only switch over that  
3 I've seen, I've only seen it once, when you have water  
4 in the fuel. And then you got on to the high suction.  
5 And the low suction we stay on all the time.

6 And then from there you're sucking, you're  
7 going into a suction strainer, which is either called  
8 your poor strainer or your cold strainer, even though  
9 it's hot. But they call it cold because the hot  
10 strainer, or the discharge strainer is after the pump,  
11 and after the fuel heater.

12 And then from there you're going to your  
13 boiler fronts. And you have your fuel regulator. And  
14 then it goes through a quick closing valve. Because  
15 that will shut if you have, that will shut if you lose  
16 your forced draft fan, or you go a low, low water  
17 level.

18 Something else, I know there's something  
19 else. I can't think of it right now. Oh, and if you  
20 lose, there's a pressure switch. There's a pressure  
21 where it senses loss of fuel pressure. That will  
22 actually close the boiler, the closing valve on the  
23 boiler front.

24 But, I mean, those, you're watching your  
25 fuel gauges every round, especially in heavy seas, you

1 know. You're calling down, say, hey guys, make sure  
2 you keep an eye on those fuel gauges. Because, you  
3 know, if you're not it can creep up on you.

4 And that's, I mean, basically the  
5 maintenance on the fuel system was strainers, making  
6 sure your settler temp was 160, approximately 160. And  
7 your fuel temperature coming out of your heater was  
8 around 225, maybe 230. And then you could see, based  
9 off of your automation, how, if your fuel here is  
10 getting fouled up.

11 Because it takes more steam to heat the  
12 fuel. The dirtier it is you need more steam to heat  
13 that up. And you can see that at the console if you're  
14 looking at the TMS or the Yokogawa (phonetic). And  
15 those are things you're being aware of.

16 And so, you're looking at your fuel temp on  
17 your settler, the fuel heater, the fuel coming out of  
18 your heater and your strainers. You're looking at your  
19 fuel pumps. And then you have our fuel pressure at  
20 your boiler front.

21 And based off of what you were doing at sea,  
22 you're normally at three burners on each boiler. But  
23 if you're maneuvering you're manually operating them,  
24 depending on the load on the boiler and the speed of  
25 the ship. And then when you get the parts you bring it

1 up to speed.

2 Anything after, up to 80 rpm you're on three  
3 burners anyway. So you're only down to one or two if  
4 you're getting, you know, 60. Yes, 60 rpm you're at  
5 two burners. 20 to 40, that's one burner.

6 [REDACTED] So the heavy seas the normal rpm  
7 would be around 60 rpm to slow it down and --

8 MR. LEVESQUE: That's the call of the --

9 [REDACTED] -- (Inaudible)?

10 MR. LEVESQUE: That's the call of the chief.  
11 Chief, I'm sorry, the captain. The captain dictates  
12 the speed. We just got to make sure we can give him  
13 the speed. If we can't we have to justify it.

14 [REDACTED] Oh.

15 MR. LEVESQUE: And, you know, we're just the  
16 throttle. You know, we're down there, what do you  
17 want? We give it to you. And then if it's, we can't  
18 give it to you we have to justify it.

19 [REDACTED] Okay.

20 MR. LEVESQUE: Or it's that we're maxed out  
21 on the board.

22 [REDACTED] For propulsion that's all I  
23 have.

24 MR. O'DONNELL: In the heavy seas when  
25 you've had problems, captain, chief, no problem. The

1 chief tells the captain, I got to slow her down a  
2 little bit, go easy on it. Will the captain be pretty  
3 cooperative?

4 MR. LEVESQUE: Absolutely.

5 MR. O'DONNELL: Yes. Okay.

6 MR. LEVESQUE: I mean, there's never been an  
7 argument between the two about, you know, we need more  
8 speed. The chief, he has total, he has the final call  
9 on the engine department. And the captain has the  
10 final call on the speed and the safety of the ship, you  
11 know. Unless it was, I never seen anything where they  
12 butted heads like that.

13 MR. O'DONNELL: So good cooperation between

14 --

15 MR. LEVESQUE: Yes.

16 MR. O'DONNELL: -- on that, between the  
17 departments with that type of stuff. Okay. Thank you.  
18 That's it. That's all I have.

19 MR. YOUNG: (Inaudible). Good. Are there  
20 any shut downs on the main unit that could protect the  
21 main unit for shut downs, over speed, trip --

22 MR. LEVESQUE: Yes, you have an over speed  
23 that will, it will trip it. Because you, based off  
24 your oil pressure. Your oil pressure, there's the two  
25 over speeds in the front that you, for the stern and

1 for the head.

2 And those are, well, the head, usually we  
3 test it once a month, make sure it's operating. We  
4 have to go, you know, probably like 102 rpm, around  
5 there. And then you just press a lever. And that  
6 basically drops the pressure, oil pressure underneath  
7 the oil relay. And then the throttle will close.

8 I mean, you need the oil pressure to open up  
9 the throttle. That's the best lock out on that. If  
10 you don't have oil pressure you can't open that  
11 throttle. You lose that oil pressure the throttle's  
12 going to close. And that's the safety on it. And over  
13 speed you do, I mean, you have a manual trip for some  
14 reason.

15 There's a button on the throttle, and if you  
16 need an emergency stop you hit that and it will drop  
17 the oil pressure, and you'll close the throttle. But  
18 it's all self regulating.

19 For over speeds it will close down based off  
20 the, there's over speed relays. And it will affect the  
21 oil pressure. It will drop the pressure from the oil  
22 relay, slowing down the ship.

23 MR. YOUNG: Do you know what the head and  
24 the stern over speed trips are set at, rpm wise?

25 MR. LEVESQUE: I can't recall off the top of

1 my head.

2 MR. YOUNG: Okay. Now if we could shift our  
3 attention the TGs.

4 MR. LEVESQUE: Sure.

5 MR. YOUNG: And give us a little description  
6 of them, how they're operated, any maintenance, typical  
7 maintenance that occurs on them. And then if there's  
8 been any maintenance issues.

9 MR. LEVESQUE: Well, it's just two 2,500 kw  
10 generators on there, (inaudible) GE generators. The  
11 manual, I mean, maintenance is done on one generator,  
12 like the one's on line, the other one's off. Well,  
13 that's, one generator's on line all the time for that  
14 month.

15 And the other one is only rolled when we're  
16 coming in, when we're maneuvering, or if we need. If  
17 it's too much of a load for one generator to handle  
18 that, the other boiler will stay on line, and we'll  
19 parallel them together to handle the load from the  
20 reefer containers. Because that puts extra load on the  
21 generator. So if we got too much of a load for one  
22 generator to handle we will put the other generator on.

23 Maintenance is done where you, maintenance  
24 done on each generator. Well, depending on if the  
25 generator's off line you purify the sump. You pull

1 the HP coupling. You grease the throttle, change the  
2 filters on the generator unit. Should be, change the  
3 oil in the (inaudible) governor.

4 Oh, you grease the LP coupling. Because you  
5 have an HP coupling and you have an LP coupling.  
6 Because it goes from the turbine. And you have an HP  
7 coupling to reduction gear or bull gear. Then it  
8 reduces down speed, what you call a low speed coupling.  
9 Is that what they call it? Low pressure, I'm sorry,  
10 high speed, low speed coupling.

11 High speed from the unit, the turbine, it's  
12 reduced down to a low speed coupling. And that's  
13 coupled to the generator. And that's coupling's  
14 greased. And you don't open it up, you just grease it  
15 by putting grease. You have the coupling hub, you got  
16 grease connections on there.

17 Then you do one hub where you flush it out,  
18 where you got good grease coming out on one coupling  
19 hub. Then you do the same thing on the other until you  
20 get good grease. And then it's done for the [REDACTED]

21 The high speed coupling is removed, cleaned,  
22 all the, I mean, because that's supposed to be able to  
23 move back and forth. Hence, it's called a flexible  
24 coupling. And you make sure that the gears are fine,  
25 are cleaned, they're not showing excessive wear. It's

1 purified for -- The LUBO purifier is put on the main  
2 sump for 24 hours.

3 You exercise the throttle, do any inspection  
4 on that. Address any steam leaks, like any, like if  
5 you need to change the packing on any of the valves.  
6 Try to, you know, correct the, you inspect the, off the  
7 pump, off the, they got some flex hoses on the LUBO  
8 pump.

9 You inspect those, make sure there isn't any  
10 cracks. If they do we have a spare to change those  
11 out. And then that's actually put into the, in AMOS,  
12 something like that. That's not normal to do every  
13 month. That's as needed. Yes. Regular maintenance,  
14 any valves as needed.

15 And then when AMOS comes up on testing any  
16 of the trips on there, you know, test that. And then  
17 the over speed trip is actually tested. That's how I  
18 shut down the generator, you know.

19 When you're ready to secure a generator you  
20 have your over speed trip, which is a panel on the  
21 bulkhead there. And what I do is, I just manually trip  
22 the over speed, which is a solenoid, drops the pressure  
23 off the whole relay. And then I would close the gimbal  
24 valve or the main throttle valve.

25 And that's tested at least, I don't know,

1 every week. On the boiler that's item for the month.  
2 So they're tested frequently. And then I change over  
3 at the end of the month. I go to the other boiler, or  
4 the other generator, put that on line for the month.  
5 And then I do the maintenance for the other generator.

6 So, you know, it's a constant maintenance on  
7 those generators all the time. I know, and when we're  
8 coming into port we have, always have one generator on  
9 line, obviously. And then the other generator's idle  
10 in case you need it in an emergency. And that's left  
11 like that until you take departure.

12 I mean, it's normal to come to port, secure  
13 one of the generators, put it back on line, and then  
14 secure and come out. You roll the other generator  
15 coming in if the (inaudible) engines are still on line.  
16 It's a real light load on the boilers.

17 And then when you leave if the load is too  
18 heavy in port, you know it's going to be a heavy load,  
19 then we parallel before we leave. And that's normally  
20 from Jacksonville. I mean, always from San Juan you're  
21 always on one generator. Because you don't have any  
22 current leaving Jacksonville.

23 We've had a lot more cargo on the ship  
24 lately. So we've been having to parallel the  
25 generators leaving. Leaving it in parallel all the way

1 down to San Juan. Once we get into San Juan, as soon  
2 as we get finished with the engines the load on the  
3 board is already enough where I can decouple the  
4 generators.

5 And then it will, through the day as they're  
6 off loading the containers you'll see the load on the  
7 boiler, or generator start dropping off. And then when  
8 we take departure from San Juan I'll secure the idle  
9 generator, and then secure it until we get to arrival  
10 on the next port, which is Jacksonville.

11 I'm trying to think. I mean, yes, jacks  
12 always, yes. I'm trying to think if I missed anything.  
13 Yes, it's a two port run. So, I mean, usually hasn't  
14 been the two generators on line leaving Jacksonville.

15 And then you're going, you know, you have  
16 two generators. You push, you know, you're going, you  
17 know, depending on, you know, you're doing 118 rpm.  
18 You're putting a strong load on the boilers. And then  
19 you get down to San Juan. You take arrival, get into  
20 port, finish with the engine.

21 I take one of the generators off the board,  
22 leave it idle. And then when we leave San Juan I  
23 secure the one generator. And then we're good. We  
24 start all over again.

25 So, maintenance. You know, that's what I do

1 on a monthly basis for a generator that's idle. And  
2 then you have, you know, AMOS comes up with the, you  
3 know, sump inspection. Make sure that the, you know,  
4 the oil, you're not getting any water in the oil, or  
5 sediment, you know.

6 After, if you get water in your oil then  
7 that, you can build and make some sort of a rust inside  
8 the sump. And that can build up sediment. So you got  
9 to make sure that's working properly. But you got oil  
10 samples, you're taking oil samples off the sump.

11 You know, when, you have a list every month,  
12 you take oil samples from certain equipment. And then  
13 it goes, they send it ashore. And they get it tested,  
14 and tell you that it looks good. Or there's something,  
15 obviously there's something wrong with it if the LUBO  
16 isn't good. And then you have correct.

17 So, it's immediate. That's something you  
18 have to have, attack, immediately attack. So, that's  
19 all I can think of right now, unless you have more of a  
20 direct question.

21 MR. YOUNG: Are you aware of any oil  
22 analysis that has returned with any issues that  
23 required correction?

24 MR. LEVESQUE: For the strut?

25 MR. YOUNG: For the TGs?

1 MR. LEVESQUE: No. They're usually pretty  
2 good.

3 MR. YOUNG: Okay. How about going back a  
4 little bit, for the main unit?

5 MR. LEVESQUE: It's pretty good. I mean, to  
6 me, everything that my, from my recollect the oil  
7 samples were pretty good, besides the strut. They were  
8 finding a little bit of particles from the bearing, and  
9 they were getting fine particles. And that was  
10 something, my understanding it was something they were  
11 going to address in the yard.

12 MR. YOUNG: Okay. And were you aware of any  
13 failures of the TGs whatsoever over the, your time  
14 there, where they secured themselves, shut [REDACTED]  
15 down, failed, any major issues --

16 MR. LEVESQUE: No, no. That would stick  
17 right in my head. Because I'm the only one that  
18 touched the generators. Actually, I mean, usually the  
19 chief, if he needs it -- My hands are on it the whole  
20 time. I mean, I'm paralleling them and I'm  
21 unparalleling them all the time. And if they were to  
22 trip, I mean, I would (inaudible).

23 MR. YOUNG: Turbo generators.

24 MR. O'DONNELL: No. I don't have any other  
25 further questions right now. Sounds like you pretty

1 well covered it. [REDACTED]

2 [REDACTED] Everything with the console,  
3 reverse power relay, all that stuff, was all in order,  
4 no issues?

5 MR. LEVESQUE: No issues.

6 [REDACTED] Tested?

7 MR. LEVESQUE: No, like, I mean, I would,  
8 you know, if I was uncoupling it I'd (inaudible) would  
9 test the reverse relays on it. You know, make sure  
10 that, you know, I dropped it, dropped the load on one  
11 and see it go down. And wait for the reverse power  
12 trip to open the breaker.

13 [REDACTED] Again, going back to the heavy  
14 weather question. Would there be any adverse effect to  
15 the systems as a result of the heavy rolling and  
16 pitching of the --

17 MR. LEVESQUE: On the generators?

18 [REDACTED] On the generators. Specific to  
19 the generators, is there anything that you can think of  
20 that the heavy weather would --

21 MR. LEVESQUE: Maybe cause and effect. But  
22 not direct to the generators. I mean, you might have a  
23 little, like the load you might see, you know, hunt a  
24 little bit. Because you got two generators, and you're  
25 rolling. And they might, you know, fight each other,

1 you know.

2 Because, you know, it's not going to hold as  
3 steady. But they might fluctuate a little bit. But  
4 not anything that the weather would cause an effect on  
5 the generators, to trip or do anything direct that I  
6 can think of.

7 [REDACTED] So, the El Faro is on its way  
8 from Jacksonville through Puerto Rico. So they would  
9 have been in that configuration where they would have  
10 been in that configuration where they would have been  
11 parallel (inaudible)?

12 MR. LEVESQUE: When I was on.

13 [REDACTED] When you were on.

14 MR. LEVESQUE: I don't know what the state  
15 was when the ship was there. When I was on, when I  
16 left, that's how we were operating, because of the load  
17 of the containers. How the ship was when they left  
18 this time, I don't know.

19 [REDACTED] Okay. I guess that would be  
20 determined by how many reefer containers they were  
21 carrying?

22 MALE PARTICIPANT: (Inaudible) itself, yes.

23 MR. LEVESQUE: Correct.

24 [REDACTED] And that's a decision the chief  
25 makes? Or is it just a decision that makes itself

1 because the load's too much for one generator?

2 MR. LEVESQUE: Basically it's the chief.  
3 He'll tell you, because based off the load that -- He  
4 knows that, I mean, he already gets, he already knows  
5 how many, what containers are going to be on the ship.  
6 So he knows that, based off this, off the car  
7 (phonetic) that's coming on we're going to need the --

8 MR. PETERSON: This is Lee Peterson. I  
9 heard (inaudible) talking over there that they were  
10 talking probably like 230 reefers would have been on  
11 this last time.

12 MR. LEVESQUE: Oh, they would be. Oh,  
13 obviously, yes.

14 MR. PETERSON: And that's, yes.

15 MR. LEVESQUE: Yes.

16 [REDACTED] In other words there would have  
17 been --

18 MR. PETERSON: Yes.

19 MR. LEVESQUE: Yes. I mean, 190 would have  
20 been basic, well 190 --

21 MR. PETERSON: But they do have a power pack  
22 on there though.

23 MR. LEVESQUE: Yes.

24 MR. PETERSON: And I'm not sure how that  
25 factors in on there.

1 MR. LEVESQUE: Oh, well, okay --

2 MR. PETERSON: (Inaudible)?

3 MR. LEVESQUE: -- they do have -- I don't  
4 know the exact number. But because of the extra  
5 containers and the load on the generators they had an  
6 independent diesel up there that would supply --

7 [REDACTED] Right.

8 MR. LEVESQUE: -- power to the containers,  
9 which would isolate it completely from the engine room.  
10 They wouldn't be, it would be independent power from  
11 the engine room. They would, diesels, you know, diesel  
12 generator would supply power to the containers up  
13 forward.

14 [REDACTED] And that was a, like a  
15 containerized module --

16 MR. LEVESQUE: Yes.

17 [REDACTED] -- type generator?

18 MR. LEVESQUE: Yes. Closed generator.

19 [REDACTED] How often did you need to use --

20 MR. LEVESQUE: They were using it every  
21 week.

22 [REDACTED] They were?

23 MR. LEVESQUE: Yes.

24 [REDACTED] So the load in the parallel  
25 mode, was that ever what you would consider a strain on

1 the --

2 MR. LEVESQUE: No.

3 [REDACTED] -- (Inaudible) handle?

4 MR. LEVESQUE: We had plenty of room, plenty  
5 of room.

6 [REDACTED] Plenty of room.

7 MR. LEVESQUE: Plenty of room.

8 [REDACTED] Okay.

9 MR. LEVESQUE: That's why, I mean, that's,  
10 you know, that's why they had the power pack up for.  
11 You weren't putting excessive load on the generators.  
12 That took all, a lot of the work stress off the  
13 generators, you know. So you had the (inaudible) power  
14 pack up front. And because of that we never had  
15 problems with the generators.

16 [REDACTED] I'm good.

17 MR. O'DONNELL: Just one more question. I'm  
18 sorry, Lou O'Donnell, ABS. The power pack for the  
19 reefers is totally isolated from the ship's main bus,  
20 correct?

21 MR. LEVESQUE: Correct.

22 MR. O'DONNELL: Correct. Okay.

23 MR. PETERSON: This is Lee Peterson. I'm  
24 sorry, I had to step out. But I did, I was wondering,  
25 Chris, I can't remember. The over speed trip for the

1 main unit. Do you recall if that's a trip, or is it a  
2 speed limiter?

3 MR. LEVESQUE: Speed limiter.

4 MR. PETERSON: Okay.

5 MR. LEVESQUE: Speed limiter. Because, I  
6 know, because I can, because I've tested them. I mean,  
7 it doesn't trip it, it slows it down by dropping the,  
8 by closing the throttle by dropping the oil off the  
9 whole relay.

10 MR. PETERSON: That's what I was thinking.  
11 But I didn't, I was trying to think of --

12 MR. LEVESQUE: I'm sorry. I may --

13 MR. PETERSON: -- something --

14 MR. LEVESQUE: Like they do have trip.  
15 There is a trip that drops the pressure, you know.  
16 There's a button up there to trip the throttle.

17 MR. PETERSON: Manual.

18 MR. LEVESQUE: Yes.

19 MR. PETERSON: Manual trip.

20 MR. LEVESQUE: But this is a limiting.  
21 That's right. It's a speed --

22 MR. PETERSON: For the over speed.

23 MR. LEVESQUE: Yes. But this is speed  
24 limiting.

25 MR. PETERSON: Yes.

1 MR. LEVESQUE: They'll slow it down.

2 MR. PETERSON: I was just trying to think if  
3 it was something with, in that rougher weather, you  
4 know, if your prop came up, you know, if you --

5 MR. LEVESQUE: But I would think (inaudible)  
6 --

7 [REDACTED] So if the prop completely came  
8 out of the water, and you're steaming ahead at 19 knots  
9 --

10 MR. LEVESQUE: No. They would have --

11 [REDACTED] - it would just --

12 MR. LEVESQUE: -- slowed down by now. They  
13 would have slowed down. I mean, that I can --

14 MR. PETERSON: (Inaudible)?

15 MR. LEVESQUE: No.

16 [REDACTED] It would have just slowed the --

17 MR. LEVESQUE: It would have slowed it down.

18 [REDACTED] It wouldn't have shut it --

19 MR. LEVESQUE: No. No.

20 [REDACTED] Okay. It wouldn't be a  
21 situation where over sped and --

22 MR. LEVESQUE: Unless there was a failure in  
23 the speed limiter (phonetic), which should have  
24 slowed it. And it would actually come to a point, if  
25 it got to extreme it would close the throttle

1 completely, or to a point where it wouldn't be a danger  
2 to the engine. It would slow it down, yes.

3 [REDACTED] Okay.

4 MR. PETERSON: And, this is Lee Peterson  
5 again. As you recall, we did go through those over  
6 speeds not too long ago, after the Masonian (phonetic)  
7 had an issue with their ship where the over speed  
8 didn't catch it. So we went through all the SeaStar  
9 ships and --

10 MR. LEVESQUE: That was --

11 MR. PETERSON: -- (inaudible).

12 MR. LEVESQUE: That, because I think that  
13 because of that was implemented into the PM, or the --

14 MR. PETERSON: The test over there.

15 MR. LEVESQUE: Yes, the test. That was part  
16 of the preventive maintenance program. Because the oil  
17 was sitting in there and stagnant. They weren't  
18 exercising it, so the oil was getting dirty in there.  
19 So when it would start and trying to operate it wasn't  
20 working properly. So we test it. And that keeps the  
21 oil fresh inside of the --

22 MR. PETERSON: It's a dead end. So you  
23 don't get a flush to there.

24 (Off microphone comment)

25 MR. YOUNG: Okay. And the last area we're

1 going to look into is the emergency generator. Yes,  
2 the same deal. If you can just give us a little  
3 description of it, the ball park maintenance that is  
4 conducted on it, and any issues with it.

5 MR. LEVESQUE: On the generator?

6 MR. YOUNG: Emergency generator, yes.

7 MR. LEVESQUE: Oh, the emergency generator.  
8 The emergency generator, we'd do a tour, and test it  
9 once a month. And that's, you know, it's, so we, and  
10 then we test, we also -- Well first we do a load test.

11 But before we, while we're doing the load  
12 test we test the automatic bus transfer on there, to  
13 make sure that when you show loss of power down off,  
14 you know, loss of power -- You simulate loss of power  
15 from the main switchboard by opening the bus tie  
16 breaker.

17 And the nav will sense the, the sensor up  
18 there will sense loss of power, open up the bus tie  
19 there, start the generator. And then it should close  
20 the generator breaker. And that's supplying power to  
21 the emergency system.

22 You know, basically it's your lighting  
23 system, and supply power to any equipment that's tied  
24 into the emergency switchboards and your LUBO pump,  
25 your air compressor. And so there's two, the very

1 final. And then that's done once a month.

2 And then any other maintenance, basically if  
3 the AMOS comes up with changing the fuel filters, we  
4 would change the fuel filters, change the oil as  
5 needed. Not as needed, but as maintenance was  
6 scheduled to do on it. And then, that was pretty much  
7 the maintenance I did on it.

8 Let me think. Oh, you know, so exercise the  
9 valves coming from the diesel tank, you know, the  
10 suction valve up there, making sure they were open.  
11 And you had to cycle that. Then you'd operate your  
12 dampers, your air intake dampers, and your exhaust.

13 You know, you have the air intake to your  
14 generator. Then you have the dampers in the floor so  
15 you got air circulation on your generator. And then  
16 you would, they'd do a weekly maintenance on the  
17 batteries.

18 The electrician, he tests the voltage and  
19 the specific gravity in the boiler, make sure that the  
20 trickle charge is being maintained in the batteries, or  
21 good voltage. And (inaudible) that batteries, the -

22 Yes, that's what we do currently, like a  
23 standard weekly, batteries we check weekly. And then  
24 with the generator we do two hour load tests, and test  
25 the bus transfer once a month.

1 MR. YOUNG: Where are the battery records  
2 kept?

3 MR. LEVESQUE: Chief's office.

4 MR. YOUNG: Are they ever entered into a log  
5 book and sent ashore?

6 MR. LEVESQUE: They, I would think they --  
7 Don't know.

8 MR. YOUNG: Were they recorded in AMOS? Is  
9 that a job in AMOS?

10 MR. LEVESQUE: Yes. They're recorded in  
11 AMOS.

12 MR. YOUNG: Okay.

13 MR. LEVESQUE: What were they recorded in?  
14 I know, yes, well they were recorded to, I would -- The  
15 exact readings, no. The frequency of them done is  
16 recorded in AMOS. But the results of the test, like I  
17 would put, the batteries were tested this week.  
18 Everything was fine based off what the electrician told  
19 me. And that the results were given to the chief.

20 MR. YOUNG: Okay. Does the emergency  
21 generator have its own fuel tank?

22 MR. LEVESQUE: Yes.

23 MR. YOUNG: Is it contained in the same  
24 space?

25 MR. LEVESQUE: No.

1 MR. YOUNG: No.

2 MR. LEVESQUE: Concern -- Well, it's  
3 contained in a tank just aft of that. And then they  
4 have drop lines that go right in there and feed it.

5 MR. YOUNG: Okay. And is there a certain  
6 level of fuel that is maintained in that tank, as far  
7 as you know?

8 MR. LEVESQUE: Yes. But I can't give you --  
9 Chief would be able to answer you better on that. But  
10 yes, there is a certain level they need to maintain at  
11 all times on that.

12 MR. YOUNG: Okay.

13 MR. LEVESQUE: And I know just before, I  
14 know they had just filled it up when I was on there. I  
15 can't remember to give the exact date. But that was  
16 topped off.

17 MR. YOUNG: Okay.

18 MR. LEVESQUE: Because I assisted with the  
19 transfer.

20 MR. YOUNG: And is there a secondary way of  
21 starting that generator if the batteries were to fail,  
22 or the two sets of batteries? Or is there a hydraulic  
23 start?

24 MR. LEVESQUE: No.

25 MR. PETERSON: Aren't there two sets of

1 batteries?

2 MR. LEVESQUE: Yes.

3 MR. PETERSON: Yes.

4 MR. YOUNG: So you could switch between one  
5 back and the other bank?

6 MR. LEVESQUE: (No audible response)

7 MR. YOUNG: And have you ever had any  
8 failure of the emergency generator, where it didn't  
9 start, or it wasn't --

10 MR. LEVESQUE: Awhile ago, back last, was it  
11 -- See, now I'm getting confused between the two ships.  
12 So, I can't say 100 percent if it was the El Faro or  
13 the El Morro. I mean, I want to say the El Faro. But  
14 it's, I want to say it was the El Faro we had something  
15 wrong with the --

16 When we tested the diesel on the two hour  
17 load test to do the, test the bus transfer, there was  
18 an issue with the breaker closing. And we had the  
19 contractor, Nortek, come in. They changed out the --  
20 Well, I wasn't there for the following repair. I had  
21 just got off.

22 But they had replaced a part. And then  
23 after that it got, it worked perfectly. It was, see,  
24 it was a periodic, not periodic, spon -- Not  
25 spontaneous, but a intermittent problem. It would

1 work, and then it didn't. Like one time we had issues  
2 with it.

3 And the, was it ABS was on there, or Coast  
4 Guard came on to make sure we -- They were notified.  
5 They came on. We got them working. We did the test at  
6 least twice for the inspector. He was happy with it,  
7 and we were able to leave. Because they weren't going  
8 to let us leave without it.

9 And then it happened again, because we  
10 tested it again. That's when they, Norcom came in.  
11 Dick Norris (phonetic) came in, and they changed out a  
12 part on it. And then --

13 MR. PETERSON: Was that the -- Lee Peterson.  
14 Was that the breaker down in the --

15 MR. LEVESQUE: It was on the main emergency  
16 switchboard.

17 MR. PETERSON: It was on the emergency  
18 switchboard (inaudible).

19 MR. LEVESQUE: Yes. But then the chief  
20 would not, you know, he was there for that repair.  
21 Because I know I, he was working. He was actually,  
22 they were repairing it when I was paying off. But  
23 after that we never had any issues.

24 You know, that's why we're kind of, you  
25 know, it's just, it's never had any issues. So it's

1 always been flawless. But then that came up. And it  
2 was, you know, the issue was corrected. And then we  
3 haven't had any issues after that.

4 MR. YOUNG: And do you know off the top of  
5 your head, it's a tough question, but do you know what  
6 degree of list that emergency generator is designed to  
7 operate at?

8 MR. LEVESQUE: No.

9 MR. YOUNG: Okay. Okay, emergency  
10 generator, anybody?

11 MR. O'DONNELL: Just confirming the location  
12 of the fuel tank. It's not exposed to weather, the  
13 emergency diesel fuel tank, is it?

14 MR. PETERSON: Yes.

15 MR. LEVESQUE: Yes. It's, well, it's the,  
16 located near the elevator shaft. So it's back aft.  
17 And it's exposed. And --

18 MR. O'DONNELL: Outside exposed. Okay.

19 MR. LEVESQUE: Yes. But it's like kind of  
20 tied into where the elevator shaft is.

21 MR. O'DONNELL: Okay.

22 MR. LEVESQUE: And then we can take a  
23 (inaudible) off the tank on the engineering deck.

24 MR. O'DONNELL: Yes. Outside the EEG space?

25 MR. LEVESQUE: Correct.

1 MR. O'DONNELL: Okay. No further questions.  
2 [REDACTED] [REDACTED] with the Coast Guard.  
3 The test that you do every month, can you just give us  
4 a description of exactly -- You said you would drop the  
5 bus.

6 MR. LEVESQUE: Oh, okay. Normally --  
7 [REDACTED] (Inaudible) tell me what --

8 MR. LEVESQUE: Okay. The test is between me  
9 and the chief.

10 [REDACTED] Okay.

11 MR. LEVESQUE: And I would go down to the  
12 engine room, the chief would be up in the emergency  
13 diesel generator room. He'd call down. And after he  
14 checked the oil level, everything was working, the  
15 dampers, and he was happy with it and ready to start,  
16 he'd call down and say, all right, open the bus tie.

17 And I would repeat back to him, open the bus  
18 tie. And I'd hang up the phone. I'd walk over to the  
19 emergency switchboard, make sure I was looking at the  
20 right breaker. Because I didn't want to open up the  
21 wrong breaker.

22 Then I would say, bus tie. Because you had  
23 the breaker, the switchboard here, and then the breaker  
24 was down here. So I'd go to open it, and open that bus  
25 tie. We'd lose the emergency lighting down in the

1 engine room.

2 I would also, before I'd do that I would  
3 tell the engineer on watch we were doing a test. And  
4 he would be with me the whole time. So I would open up  
5 the bus tie, we'd lose lights. And after a few seconds  
6 the lights would come back on, indicating that the bus,  
7 the automatic but transfer system worked, the generator  
8 was supplying to, the emergency diesel generator was  
9 supplying power to the emergency lighter.

10 From that on we would run it for two hours,  
11 do a two hour load test. And then when we were done  
12 the chief, you know, I would talk to the chief.  
13 Everything good? We're good down here.

14 Any of the pumps -- I would make sure,  
15 before we do the test, normally if we have a pump that  
16 was running off the emergency circuit, to save us from  
17 having to restart it I'd always swap over, like say the  
18 LUBO pump. So I, you know, I'd swap it over, and you'd  
19 see it, you know, swapped over.

20 And then I'd do the, you know, we'd do the  
21 test, make sure that like the air compressor might be  
22 on the emergency circuit. We'd have to reset that so  
23 it would start automatically. And then you'd have to  
24 reset the bilge, the submersible bilge pump up in the  
25 far control room.

1                   And then run it for two hours. And then  
2 we'd log it. And then he'd call down and say they're  
3 ready to close the bus tie. Because you would see,  
4 once you have regained power everything should happen  
5 automatically, where the generator will come off.

6                   So I'll go down. He'll say, close the bus  
7 tie breaker. I'll be on the phone. He's in the  
8 emergency diesel generator room. He's really yelling,  
9 because the generator's running. He's saying, close  
10 the bus tie. So I go over and then close the bus tie.

11                   And what would happen is the bus tie would  
12 close down there, energize. The power going to the  
13 emergency generator would sense that. Then would open  
14 up the breaker for the diesel generator. You'd see  
15 loss of power. And then the breaker would close up  
16 there and supply power to the emergency lighting. And  
17 then that was the test. And then you'd log it.

18                   ██████████ So during the test would you  
19 guys run the ballast and the bilge pumps to make sure  
20 that the generator is handling the full gamut of the  
21 load?

22                   MR. LEVESQUE: No. We would do it basically  
23 just, I mean, to handle, it was just basically off the  
24 emergency lighting, or any of the other items. No, we  
25 wouldn't run any pumps off that. It wasn't necessary.

1 [REDACTED] So it was never really a full  
2 load test?

3 MR. LEVESQUE: No, we would never, we never  
4 did a full load test.

5 [REDACTED] Okay. Did you ever routinely  
6 test to make sure that the bilge pumps were getting  
7 power from the emergency circuit?

8 MR. LEVESQUE: Well, you had, I mean, they  
9 were, if you weren't getting power they wouldn't  
10 operate. So they knew, regardless of where power's  
11 coming from --

12 [REDACTED] The bilge pumps, the valve  
13 pumps, the fire pump, all that stuff is not necessarily  
14 running simultaneously.

15 MR. LEVESQUE: No.

16 [REDACTED] You guys knew that they were  
17 getting power.

18 MR. LEVESQUE: Yes. Because --

19 [REDACTED] They were operating all --

20 MR. LEVESQUE: It was coming off the  
21 emergency switchboard. And if that wasn't working  
22 properly you would know it regardless of which was  
23 supplying power, the main generator or the emergency  
24 diesel generator.

25 [REDACTED] Okay. (Inaudible).

1 MR. YOUNG: Good? Okay. Just two more  
2 areas, and then I think we may be getting close to the  
3 end here. Changing gears completely, and talking about  
4 riding gangs (phonetic). As we understand it there was  
5 a riding gang aboard the ship last week when they  
6 sailed. Did you ever have any experience having riding  
7 gangs aboard while you were working?

8 MR. LEVESQUE: Yes.

9 MR. YOUNG: Okay. Do you have any  
10 recollection or idea as to why the riding gang may have  
11 been aboard the El Faro last week?

12 MR. LEVESQUE: Yes. They were part of the  
13 conversion. They were converting parts of the ship  
14 back to the way it was when it was operating on the  
15 west coast. Because the ship was scheduled to go on to  
16 the west coast, while the workers' ship was due to go  
17 in the yard and get converted over to a LNG burning  
18 diesel.

19 MR. YOUNG: And had any of this work began  
20 the last time you were on the ship?

21 MR. LEVESQUE: It just started.

22 MR. YOUNG: Just started. And do you know  
23 the extent of work that was to be carried out in the  
24 engine room, within the engine spaces?

25 MR. LEVESQUE: Yes.

1 MR. YOUNG: Can you give maybe a small scope  
2 of work of what they may have been doing in the engine  
3 room?

4 MR. LEVESQUE: Well, they had to get the de-  
5 icing system back on line, make sure that the system  
6 was flushed and they could get the pump running. They  
7 also had to put the Butterworth (phonetic) heater back  
8 in, so that could supply steam to the sea chest  
9 (phonetic).

10 Because when operating on the west coast you  
11 got to make sure that, they had issues with ice getting  
12 caught in the sea suction. So the Butterworth would  
13 prevent that from losing suction.

14 And then you also had, you know, you had  
15 valves they needed to put back in. Because any system  
16 that was tied into the Butterworth was blanked off. So  
17 it was completely isolated from the engine room, or any  
18 systems on the ship.

19 Butterworth and the de-icing that, as far --  
20 Unless they were doing something else. Because of the  
21 contract work, that's my understanding that was it they  
22 were doing in the engine room. There may be something  
23 else that I was unaware of.

24 MR. YOUNG: Any other riding gang questions?  
25 Okay. You have given a great description of your

1 engine room and maintenance, and possible failures, or  
2 anything. Now, we're asking for your help too, if you  
3 -- And it seems like everything had been running very  
4 well.

5 And as far as we understand the ship, when  
6 it was out last week had about a 15 degree list to port  
7 when they last communicated in. And the message was  
8 that they lost, I have no engines. And that's all we  
9 know.

10 Is there anything that you could speculate,  
11 or assist us in trying to figure this out, as to what  
12 may have happened to cause a loss of the engine. And  
13 we don't know whether it's a loss of bulk boiler, or  
14 loss of the main unit.

15 MR. LEVESQUE: I mean, when you say no  
16 engine that's the, you need to find out what part of  
17 the engine, you know. You have steam side and you have  
18 the salt water side. You got a consate (phonetic)  
19 side. And that, we will have no engine, you know, or  
20 you have a LUBO, you know. You have, you don't know  
21 what exactly to pinpoint.

22 So for me to sit here and speculate, I mean,  
23 we'd be here for another couple of hours. I mean, just  
24 look, this could happen, that could happen. I'm sure,  
25 I mean, everybody that's here, you know, is aware of

1 what could happen in severe weather like that.

2 But, I mean, it could have been as simple as  
3 there was a, something, maybe a gasket that, you know,  
4 made, put steam in the engine room. And they needed to  
5 stop the, or secure the main engine. So having no  
6 engine, that's such a broad statement.

7 You don't have a clue. What do you mean, no  
8 engine? I mean, or even when, you know, I mean,  
9 there's more than one. There's a diesel engine on  
10 there. I mean, was it, are you sure, he said there was  
11 no main engine, or no engine?

12 MR. PETERSON: Well, actually it was loss of  
13 propulsion. He said he didn't have propulsion.

14 MR. LEVESQUE: Oh, propulsion?

15 [REDACTED] Yes. And his -- They were --

16 MR. PETERSON: That was John's notes when he  
17 said no engine.

18 MR. O'DONNELL: John's notes from the  
19 captain to DBA was no main engines.

20 MR. LEVESQUE: Well, loss of propulsion. I  
21 mean, yes, like I said, you have to break down what  
22 systems are affecting it. So the engineer calling up,  
23 the chief, the first are saying, you know, he gave me  
24 information.

25 Then what the captain, how he summed that

1 up, to save getting into too much detail at the  
2 immediate time, I have, you know, we have no  
3 propulsion. So what's affecting the propulsion? Oil?  
4 Steam, steam leak? Lube oil? A water leak?

5 You know, I can't, you know, you could look  
6 at the areas. But to pinpoint which one was the actual  
7 cause, no. But everything is just, well, this could  
8 have happened, this could have happened. And, you  
9 know, you can (inaudible) this much in saying, what  
10 could have happened to the El Faro? And, you know,  
11 until you get --

12 But that question is so vague that we're all  
13 going to be scratching our heads until, you know.  
14 They're never going to have an answer for that unless  
15 someone can see, you know. You know what I mean?

16 But to this, I mean, because the ship was  
17 running for two months. And like, if maybe if I had  
18 just gotten off, and this happened, I may give a better  
19 insight. But the ship was running for two months. And  
20 it's, you know, I never got, there wasn't like a phone  
21 call home from my relief saying, you know, this  
22 happened, do you have any idea?

23 Or, you know, everything was, you know,  
24 happened was in my notes. And it wasn't anything that  
25 happened when I got off that jeopardized the safety of

1 the ship. And then now this happened. I don't know.

2 You know, we had a loss of propulsion.  
3 That's, you know, too vague to speculate on. And I  
4 dare not to. It's just too many variables. Too many  
5 variables.

6 So, I'm sad to have to say that. I'm sad we  
7 can't have some sort of definitive answer on this. But  
8 it's a shame, because I know a lot of families want  
9 closure. But it's the best I can do, you know.

10 MR. YOUNG: Well, we understand. We just,  
11 you know, we had to throw it out there, you know, just  
12 to see, you know.

13 MR. LEVESQUE: Absolutely. I don't want to  
14 be like everybody else say, it's vague. And then me  
15 say, well it could be this. Well, no, I can't. That  
16 would be wrong. So I'm going to leave it at that.  
17 It's too --

18 MR. YOUNG: We understand. But I appreciate  
19 you trying. So, I don't have any other questions. If  
20 anybody else does --

21 MR. O'DONNELL: I just, Lou O'Donnell, ABS.  
22 A couple of quick questions. When you were onboard did  
23 you ever work with your regulatory party's Coast Guard  
24 ABS? And if so, what did you, how did you feel about  
25 the quality of the survey and inspection, and working

1 with --

2 MR. LEVESQUE: Well --

3 MR. O'DONNELL: -- the regulatory bodies? I  
4 mean, intrusive, cooperative, helpful? I just, I'd  
5 like to hear your feedback on --

6 MR. LEVESQUE: No, they weren't intrusive.  
7 They were, they're very helpful. They're there to do a  
8 job. And they're not there to like have it out for us.  
9 They're here to provide safety for me, and the crew,  
10 and the ship. They're not there just to, you know,  
11 give trouble to us, you know.

12 And they're doing, and basically they're  
13 coming, we have to do certain tests. And they have  
14 inspections, and a reason why. It's because of the  
15 safety of the ship.

16 [REDACTED] Yes.

17 MR. LEVESQUE: It's the, that's the rules.  
18 That's the regulations. And that's why they're there.  
19 We can, if he -- Now, I never had someone come off  
20 gunning to break our balls.

21 [REDACTED] Bust your chops. Yes. Okay.

22 MR. LEVESQUE: So, you know, they were  
23 there. They did, it was a legitimate test. We had to  
24 prepare for it, make sure everything was working. So  
25 when he came and he said, well, I want that done. I

1 want to see that.

2 We had no idea if anything (inaudible). It  
3 was there. We felt confident. They were ready to show  
4 him anything he wanted, do any tests, and that it would  
5 pass. And if it didn't pass, thank God we caught it  
6 now. You know, we would correct it. But no, there  
7 were never any issues.

8 MR. O'DONNELL: Now I know you called one of  
9 the chiefs, the newer chief. I think it was Keith, you  
10 said. Called, or, oh wait, I'm sorry. You called him  
11 Mr. Safety. And, you know, there was, they promoted  
12 safety and the policies within the engine -- Mr.  
13 Policy. Excuse me. Just overall (inaudible) safety.  
14 Is it a high priority?

15 MR. LEVESQUE: Absolutely. Absolutely. I  
16 mean, I would --

17 MR. O'DONNELL: Okay. That's all I have.

18 [REDACTED]

19 [REDACTED] [REDACTED] with Coast Guard. And  
20 just a couple of follow-up questions that kind of lead  
21 into what you were thinking. In preparation for the  
22 certificate of inspections you guys would test anything  
23 that you -

24 During those tests in preparation for this  
25 COI or the surveys, did you ever have any deficiencies

1 that were notable, or anything that needed to be  
2 repaired prior (inaudible) the COI? Do you understand  
3 what I'm getting at?

4 MR. LEVESQUE: Yes, I know, yes.

5 [REDACTED] (Inaudible) the over speed  
6 didn't work.

7 MR. LEVESQUE: Yes.

8 [REDACTED] Or one of the gas turbines where  
9 you fixed that, and then the next day when the Coast  
10 Guard was there or -- Was that ever a scenario that was  
11 --

12 MR. LEVESQUE: Let me think now.

13 [REDACTED] And again, we're not looking --

14 MR. LEVESQUE: I know. I'm just trying to  
15 think of an example. I mean, if we had anything that  
16 sticks in the back of my mind. I know it's, I remember  
17 when we were, we had the check off list, we went  
18 through it. Most, we never really had issues.

19 If we, I'm -- Yes, never had something that  
20 really sticks in my mind. If it was it was something  
21 minor, like maybe a pressure switch. Well, it's  
22 (inaudible). But that would that would be, was it, did  
23 it go off at the right pressure? Was it too low? Was  
24 it running weak, or something like that. But nothing  
25 that was --

1                   ██████████ So is that a situation where  
2 you'd put that in the log?

3                   MR. LEVESQUE: Yes.

4                   ██████████ Pressure switch (inaudible)?

5                   MR. LEVESQUE: Oh, yes. A lot of, like if  
6 something was tested, or if something went off because  
7 of maybe we were working on something and that alarm  
8 went off. Oh, that's, you know, it was tested, and we  
9 would log that.

10                  ██████████ Okay. With regards to the  
11 safety equipment, the lifeboats, survival suits, in  
12 general how did you feel about the, how comfortable  
13 were you with the quality and the quantity of the  
14 safety equipment aboard the vessel?

15                  MR. LEVESQUE: Well, the quantity was there.

16                  ██████████ Okay.

17                  MR. LEVESQUE: I mean, and the safety of the  
18 equipment, you have two lifeboats. I mean, it was an  
19 older ship. It wasn't an enclosed one. We would love  
20 an enclosed lifeboat on the ship. But for the, well,  
21 the requirements it was full.

22                               I worked on the, I mean, I worked on the  
23 lifeboats. We did maintenance on it. They ran. I  
24 mean, they were, for lifeboats that, I mean, from my  
25 experience, lifeboats, they were solid lifeboats. And

1 they were tested, dropped every, well once a week.

2 Most of the time when we done a lifeboat  
3 drill we'd lower it down to the embarkation deck, then  
4 bring it back up, test your limits. And then, you  
5 know, put it back in the cradle. But they were  
6 operating. Inspection on the brakes.

7 You know, we had one lifeboat was a diesel.  
8 The other one had flemming (phonetic) gear. You know,  
9 that was, it was tested. The lifeboat was ran once a  
10 week. The flemming gear was exercised, and then  
11 inspected. I did work on the flemming gear. I did  
12 both lifeboats before I got off. So I know they were  
13 running.

14 You know, did the oil change on them, oil,  
15 the fuel filter and the LUBO filter. The LUBO was  
16 changed out just before I got off. Because I know,  
17 because I did it.

18 And I changed out the oil in the  
19 transmission on the flemming gear. Not that that would  
20 really affect the operation because you're not dealing  
21 with high rpms. But that was done. And, you know, and  
22 they, what else?

23 Yes, I mean, they, I mean, based off the,  
24 what comes up on inspection, all the inspections had  
25 been done. I mean, they, it's not like they -- When

1 inspections are called to do, they do it.

2 [REDACTED] So from the overall crew  
3 perspective, do you feel like that everybody in the  
4 crew was proficient in the use of the equipment, and  
5 well trained?

6 MR. LEVESQUE: As well trained as they  
7 motivate. You know, some guys when they go through  
8 training they just go through the motions. Some people  
9 you know. But they're aware of how to use all the  
10 equipment. And they can't say they didn't know how to  
11 use it.

12 Because they had training from their  
13 (inaudible) school. You get the weekly training.  
14 They're talked to. They sign the sheet saying they  
15 were at the meetings. There's no excuse why they  
16 shouldn't be able to use that. Because there's, if you  
17 have any questions, ask them now. Here is it, right in  
18 your face.

19 And if they didn't know how to, if they  
20 didn't feel like they could use it because of their own  
21 fault, it's not like the opportunity wasn't there. I  
22 mean, they're not, we're not hiding any information  
23 from these guys. The training's there. And it's how  
24 motivated they are at the drills.

25 You know, some guys they just go, watch, and

1 then leave. But when you, are you really paying  
2 attention, you know. And a lot of times it's like you  
3 don't, you know, when am I ever going to use this? But  
4 then, here's a time that they could have used it.

5 Are they going to remember? But that's up  
6 to the individual. But the, it's there. I mean, the  
7 safety, they do it all, they do diligence on all that  
8 stuff, you know. I mean, they make sure people are  
9 aware as part of the program. So, there's no excuse.

10 I mean, I could understand when you're  
11 nervous and scared, and you know, sometimes you forget  
12 your training. But that's when your training should  
13 kick in. You're hoping that's what happens.

14 ██████████ Thank you.

15 MR. O'DONNELL: Thank you.

16 MR. YOUNG: One last question. Bryan Young.  
17 Do you remember which boat was which side?

18 MR. LEVESQUE: Absolutely. Port had the  
19 diesel. And the starboard was the flemming gear. Port  
20 boat was my lifeboat for years. And I, port side,  
21 there it is. Watch it lower, come up. Yes.

22 MR. YOUNG: We fired about 300 questions at  
23 you. Do you have any questions for us?

24 MR. LEVESQUE: No. I just hope that, I wish  
25 I would have been more helpful to you guys to come up

1 with some more answers, you know, to give to people to  
2 see why this happened and, you know, to hopefully it  
3 doesn't happen again. But, you know, that's, I mean, I  
4 can only tell you what I know. So, I'm sorry I  
5 couldn't give you any more information.

6 MR. YOUNG: It's a world of information, you  
7 know, very, very accurate, very, you know, descriptive  
8 information. We really appreciate it.

9 MR. LEVESQUE: I do apologize, it seemed  
10 like I got, you know, some of the answers weren't as  
11 clear because I got maybe a little flustered sometimes.  
12 But, you know.

13 MR. YOUNG: No. So, no further questions.  
14 I'll end the recording at 1611. And thank you very  
15 much again for your time. We really appreciate it.

16 (Whereupon, the above-entitled matter went  
17 off the record at 6:11 p.m.)  
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C E R T I F I C A T E

MATTER: El Faro Incident  
Accident No. DCA16MM001  
Interview of Chris Levesque  
Jacksonville, FL

DATE: 10-08-15

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PAGE NUMBER	LINE NUMBER	CURRENT WORDING	CORRECTED WORDING
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85	24	LUBO	Lube Oil
96	16	Workers	Orca's
107	15	LUBO	Lube oil

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